# Girls' perceptions of challenging work and the factors that motivate them to engage with challenging work within the selective independent sector.

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## Abstract

This study focuses on the perceptions of challenging work amongst girls in Years 9, 10 and 11 in single-sex schools in the selective independent sector, and of the factors that they perceive motivate them to engage with challenging work. Although many girls in English selective independent schools achieve amongst the highest GCSE and A Level results in the country, some teachers at these schools are concerned that the girls can be uncomfortable when they are encouraged to think for themselves. This can include girls who are perceived to be 'more able' in comparison with their peers.

To understand how to encourage students in this sector to readily engage with challenging work, this study surveyed a total of 192 students in Years 9-11 from three selective independent girls' schools in North and Outer London via a survey that was created from focus group responses on the topic of challenging work. The findings from both the qualitative and quantitative data analyses are woven together to create a cross-sectional snapshot of student perceptions of challenging work.

The findings suggest that the participants were able to offer rich descriptions of challenging work and that they felt moderately challenged by the work that they were given but that ultimately they desired, and their actions indicated a preference for, 'comfortable' rather than challenging work. They held performance goals in the guise of mastery goals, with GCSE examinations providing a key contextual factor affecting their readiness to engage with challenging work. The study concludes by suggesting that classrooms which are inspiring and challenging environments may help students to be motivated to engage with challenging work. Without this, selective girls' independent schools may be helping their students to achieve high grades without encouraging all to fully realise their academic potential.

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

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# Reflective Statement

## Introduction

When I embarked on the EdD programme in October 2009 I knew that I wanted to explore the issue of 'more able' education, then labeled Gifted and Talented (G&T) education, within the context of selective independent girls' schools and how that provision might be improved. Since teacher training I had had an interest in how the most able within the classroom were being provided for in their learning. Whether they were being stretched, or allowed to coast, how their sometimes complex emotional needs were being dealt with by schools and parents, and how they were regarded by their peers and the impact this, in turn, had on individual students. Six years ago I faced some resistance in the staffroom to my ideas that able students should be specifically provided for as part of a philosophy where all students have their learning personalised to an extent.

The culture in my staffroom has shifted to some extent towards a more favourable view of specific provision for 'more able' students within the classroom. However, the feeling that teachers do not fully understand how to appropriately challenge their students, including the 'more able', has been present throughout my entire EdD programme. Both of these views have shaped the various assignments that I undertook as part of the taught elements of the EdD, my Institution Focused Study (IFS) and finally my Thesis.

## Progressing towards the Thesis: the development of my academic thinking through taught courses and IFS

Throughout the EdD I have felt that my reading and the feedback I was given on assignment both deepened and clarified my views and perceptions.

The Foundations of Professionalism course led me to consider Aristotle's concept of 'phronesis', the idea that people are happiest when they are given

freedom to develop in their own ways. This, and the opportunity to read and think critically about leadership literature for the Leading in Learning course, gave meaning to my perception that a collaborative style of leadership may be the most effective way of bringing about change in education. It subsequently led to my study of the use of teacher collaborative enquiry in the context of developing a 'more able' curriculum for my IFS study.

My IFS findings indicated the complexity of encouraging teachers to work together in order to improve their classroom teaching for groups of students. The collaborative teacher conversations highlighted tensions within the concept of 'phronesis'. As part of the process of collaborative teacher enquiry, and to enable 'phronesis', the teachers were not given a rigid structure with which to engage in discussion of how to provide for their 'more able' students. Some teachers expressed frustration as they felt they did not know what to do at the start of the collaborative process, thereby indicating that they would have liked more guidance. In contrast, any negative comments during the collaborative conversations were with regards to the guidance materials provided. To me, this highlighted the tensions between teachers wanting guidance – and indeed, perhaps needing guidance for effective professional learning to take place – and allowing teachers the freedom to develop their collaborative enquiry so that all would benefit from the concept of 'phronesis'.

Analysing the collaborative conversations helped to move me towards studying the perceptions of students in my Thesis. None of the collaborative groups in the IFS had systematically surveyed students to find out student perceptions of the value of their teachers working collaboratively and I began to feel that there was a disconnect between teachers trying to improve their practice and discovering what the implications of this were for the learning of their students. I also felt that it was more pressing to investigate why the students themselves did not wish to engage with challenging tasks and showed a preference for spoon-feeding, as this issue was becoming a whole school focus. While each of the taught courses and the IFS concentrated on the development of a 'more able' curriculum, I felt that it would aid my development as a school leader to develop techniques that would help me to understand student

perceptions more effectively. This led to the use of focus groups in my Thesis, from which I developed a student survey. To ensure a larger cohort, and because individual schools define 'more able' in different ways, I broadened the Thesis to include the perceptions of students who had not been identified as 'more able'. To ensure that the Thesis was manageable, I decided to focus on students in Years 9-11 the transition from Key Stage 3 into Key Stage 4, as this is the stage at which students move from not being tested on a national scale to completing their GCSE examinations. It is also the point at which teachers at my school start to remark that students show a reluctance to engage with challenging work.

**Reflection on the Thesis**

The topic of my Thesis took me into a new body of literature, as I was moving away from staff professional development and into a consideration of the factors that motivate students to engage with learning, deep learning and challenging work. Although there was a broad range of literature on the three issues, the combination of the three strands that formed the theoretical basis for my Thesis was a new way of conceptualising the issue of student readiness to engage with challenging work. The literature underpinning student motivation was the densest and took the longest to work through, but achievement goal theory (Midgley 2002; Elliot 1999; Pintrich 2000) and expectancy-value theory (Pintrich and Schunk 2002) emerged as the most pertinent for my study as they directly linked the motivational influences of students with the classroom environment. Understanding how deep learning, or moving beyond surface learning to understand material more fully, was in itself challenging for students but most valuable for their development (Marton and Säljö 1976) confirmed the importance of challenging tasks over spoon-feeding information to students. Finally, the importance of appropriately challenging work for better student learning, motivation and interest (Chae and Gentry 2011), indicated that the nature of a task itself could help engage students in its completion.

The combination of the three strands of literature – factors that influence student motivation, deep learning and challenging work - led to the phrasing of the three research questions that shaped my study:

1. What do girls in the transition between KS3 and KS4 in the selective independent sector perceive as challenging work and is this linked to theories of deep learning?

2. How do girls in the transition between KS3 and KS4 in the selective independent sector feel about the level of challenge in their current work?

3. Are there specific motivational factors or factors in the classroom environment that are associated with girls' readiness to engage with challenging work in the particular Key Stages of KS3 and KS4?

Through my theoretical framework I was thus considering the point at which student perception of the level of challenge within tasks combines with how teachers encourage deep engagement with challenging tasks, and with the achievement goals and expectancy value of the tasks perceived by students. The difficulty in finding studies of students in the independent sector indicated that this was an under-researched area, whilst the fact that I work in this sector confirmed the importance of studying the perceptions of this group of students. Teachers in my school were asking questions of how to encourage students to engage in more challenging work.

The Thesis was a much longer process than I ever envisaged. By this stage I had a husband and a small son, and it was difficult to set up the research, process and analyse the data, and write up my findings whilst balancing family life and a return to a full-time position as Head of History and More Able Co-ordinator. I had to teach myself basic statistics and often found I was overwhelmed with data from my survey – and with a sense that some of my survey questions could have been more usefully composed.

However, working through the data methodically, returning periodically to the literature, and thinking through the theories that underpinned my research has been the most satisfying part of the EdD. The realisation that girls in the selective independent sector desired 'comfortable' work rather than challenging work has given depth to my understanding of why students often shy away from more challenging tasks. It also reinforced my feeling that teachers should seek to provide an appropriately academically inspiring learning climate. This confirmed the importance of the work on effective staff professional development I completed for the taught courses and IFS: finding a way to achieve this academically inspiring learning climate is complex.

**Professional implications**

To be able to present my Thesis findings to the students from my school who had taken part in the focus groups and/or the survey has been rewarding. To present my findings to a staff body that has been grappling in the staffroom and at Inset sessions with the issue of student requests for 'spoon-feeding', and subsequent critiques of the study or interest in their own further professional development, has been even more exciting.

I am about to take up post as Director of Sixth Form at a prestigious girls' school in Sussex from January 2016 and I am looking forward to the challenges that will come from working within a different context of girls' schooling. I hope to take what I have discovered about girls' attitudes towards challenging work and how teacher collaborative enquiry can be used as a model of professional development for staff as I move into senior leadership. The phrase 'Student Voice' may be en vogue, but how much attention do we as teachers pay to understanding what our students say, to distinguish between truths and perceptions, and to help students to develop? How much 'hidden' knowledge is there within our schools that could be released through teachers purposefully engaging in collaborative enquiry to further the end of developing students? Furthermore, does the senior leadership team listen to the 'Staff Voice' both in terms of the knowledge they have about the students they teach

and how schools can best prepare these students for the future? As teachers are the ones who will be conveying messages within the classroom, and thereby helping to shape the climate in which students develop their motivational goals (Midgely 2002), this is an important aspect for school leaders to take account of. I see my IFS and Thesis as a starting point for further understanding these issues, not as a conclusion.

**Final Remarks**

I never imagined as a PGCE student that I would be teaching in the independent sector 11 years after qualifying, and less still that my career would develop solely in girls' schools. I am aware of the arguments against independent schooling and do feel personal and professional tensions between teaching students who, in most cases, are undoubtedly privileged in being able to attend a fee-paying school, and the sense of freedom that comes from working in a sector that is less subject to the whims of a national government. However, I feel passionate about developing the abilities of young women to think creatively and confidently, helping to prepare them for whatever their future holds. I am also passionate about working with their teachers so that this goal can be realised. Finding myself in the independent sector, this is the group of students and staff I will work with at this stage of my career. I am ambitious for the young women of this country and what they can achieve, and I wish to further listen to what they have to say about how they learn best as well as investigate how teachers can help girls to see beyond the syllabi to realise their potential. And that potential is much more than a string of A* grades - or equivalent.

# Chapter 1: Introduction

## 1.1 Context of the study

This study focuses on the perceptions of girls in single-sex schools in the selective independent sector towards challenging work. It has emerged from my concern that many of my History students increasingly desired to be guided towards the 'correct' answer or interpretation of the past as they progressed through to GCSE and then A Level. Although by no means true for all, it was rare for my older students to show the independence of mind to challenge ideas, to stretch themselves by engaging in abstract or creative thinking, or to show scholarship.

More broadly, I have also been the 'More Able' coordinator at my institution since September 2007 and have therefore been responsible for developing whole school projects and working with teachers to ensure adequate stretch and challenge for all of our students. As a selective, independent girls' school in north London, with pupils achieving excellent GCSE[1] and A Level[2] results and most going on to study at top British universities, it would appear that student learning is effective. However, for a while there has been a concern amongst staff in my school that our students can be uncomfortable when they are encouraged to undertake more challenging work or to think for themselves. This was particularly the case with students who were studying for their GCSE examinations in Years 10 and 11.

The perception that many of our students did not want to engage with challenging work, combined with an Independent Schools Inspection (ISI) report in 2009 that recommended that the school provided greater levels of challenge for 'more able' students and the changes to A Level and GCSE examinations from September 2015 to encourage more academic rigour (Coughlan 2012;

[1] General Certificate of Secondary Education. These examinations are generally taken by 15-16 year olds, following a two-year course of study.
[2] Advanced Level Certificate. These examinations are generally taken by 17-18 year olds, following a two-year course of study.

Richardson 2013), created a context in which many teachers knew that a change was needed. In our school, the senior leadership team believed that we should be seeking ways to cultivate greater academic challenge so that all of our students were appropriately challenged in their learning.

This study focuses on the intersection between three areas of research as a way of understanding how to encourage students to engage with more challenging work: student perceptions of challenging work, their engagement with deep learning strategies and their motivational orientation. I was interested in seeking the perceptions of students, both those who had been identified as 'more able' and their wider peer group, of challenging work and how they thought they responded to it. By understanding the reasons that the girls offered for engagement with, or lack of engagement with challenging work, I hope to recommend approaches that can be taken by teachers in this sector so that they are successfully able to encourage students, including the 'more able', to engage with challenging work.

To narrow the focus of my research, I looked at the transition from the end of Key Stage 3 (KS3) into Key Stage 4 (KS4). This is because at this stage students in 11-18 schools in the independent sector move from a situation where they are not subject to external assessment to a course of study that culminates in GCSE examinations. I was interested to see whether there was a change in attitudes towards learning brought about by this shift in emphasis from non-examination to external examination. I used focus groups to identify the perceptions of 'more able' students in the independent girls' sector towards challenging work. The findings from the focus groups led to the creation of questionnaires that were then given to students in Years 9, 10 and 11 in three independent girls' schools in North London and Outer London.

## 1.2 Outline of the structure of the thesis

Chapters 2 and 3 provide a review of the literature that helped to inform the research questions. Together, these two chapters present the intersection between theories of challenging work, deep learning and motivation, which form

the theoretical framework of my study. Chapter 2 discusses the education of students in the selective independent sector amidst national concerns that students are not being adequately challenged in schools; definitions of challenging work and the relationship between challenging work with theories of deep learning. Chapter 3 outlines achievement-goal theory and expectancy-value theory; girls' approach to studying; and student perceptions of their learning and their actions in a school-created learning culture.

Chapter 4 outlines my theoretical perspective as a researcher as well as the process and analysis of data collection through focus groups and questionnaires.

The data are presented in Chapters 5, 6 and 7. Chapter 5 explores aspects of challenging work as perceived by the students. Chapter 6 explores student perception of challenge in their schoolwork. Chapter 7 explores student perceptions of the factors that enable them to engage with challenging work.

The findings are discussed in Chapter 8, addressing each of the research questions, with implications for schools suggested. The limitations of the study and areas for future research are also discussed further in this chapter.

# Chapter 2: Challenging students within the independent schools sector in the UK

This is the first of two chapters in which I seek to set my study of the perception of challenging work held by girls in the selective independent sector within a theoretical framework. Firstly, I will discuss issues surrounding private schooling, the education of 'more able' students and national concerns about student academic achievement. I will then provide definitions of challenging work and theories about deep learning, showing the relationship between these and how they correspond to challenging students in the independent sector.

## 2.1 Private schooling and the 'More Able'

The study took place in three schools in the selective independent sector. While a discussion of the moral and ethical basis of whether or not students should be educated in independent, fee-paying schools is outside the scope of this literature review, there is clear evidence that the 7% of the population who attend fee-paying schools perform highly in public examinations (Walford 2009) and therefore exhibit outcomes of being 'more able', if compared to students on a national scale.

In a selective school, the ability range of the students may be higher than the national average but this may be explained more by the cultural capital that these students have been exposed to rather than the input of the schools themselves (Exley and Suissa 2013). The idea of cultural capital was coined by Bourdieu, who used it to refer to non-financial social assets passed down from parents to their children, such as education and style of speech that people deem worthy of being pursued. Bourdieu argued that schools rewarded students who participated in elite status cultures by giving them more attention and perceiving them as more intelligent or gifted than students who lack cultural capital (Bourdieu 1977). This reflects the view of educational psychologists who have shown that children are born more or less equal in terms of the specific abilities associated with achievement and, over time, become differ-

entiated according to the amount of practice they have in mastering the domain specific knowledge and skills (Ericsson, 1996; Howe 1999).

The students who formed the focus groups were recruited from my school's 'more able' register. This was because I was interested in seeking their perceptions of challenging work in my role as 'more able' coordinator and whether the perceptions of challenging work expressed by 'more able' students were generally shared across the whole year groups, including those identified as 'more able' as well as those who were not identified in that way. As these 'more able' students were singled out as a group for this phase of the study, I will now discuss the background to the phrase 'more able' and why it is a group that is currently receiving national attention.

The identifying of 'more able' students by schools is generally seen to be for the purpose of ensuring all students' needs are adequately provided for (Smithers and Robinson 2012); regardless of which school the students are in, each student should be provided with appropriate levels of challenge so that they are able to realise their potential (Eyre 1997; Renzulli 1998).

A range of terminology has been used for students who are more academically able over the past three decades, such as 'able', 'highly able', 'very able' and 'exceptionally able' (Lambert 2010). American literature has used the term 'gifted and talented' for a long time (Reis and Renzulli 1991), whilst the 'Excellence in Cities' programme of the early 2000s (Ofsted 2001) and a subsequent national strategy, the 'National Programme for Gifted and Talented Education', shaped the provision in the United Kingdom (Lambert 2010). 'Gifted' was equated with academic ability and 'talented' with vocational ability including sport, music and drama. All schools were obliged to identify five to ten per cent of their pupils as 'gifted and talented' in order to ensure that differentiation of learning for 'more able' pupils was a concern and a responsibility of all schools, not just those who had a large number of very able students (Dracup 2003). The language surrounding the brightest and most talented students in UK schools has recently moved away from a definition of 'gifted and talented' towards 'more able' or 'highly able' (Smithers and Rob-

inson 2012). Many schools retain the old definition of 'more able' students as those being in the top five to ten per cent of a school cohort, but there is still a lack of clarity over the means of identification within schools (Smithers and Robinson 2012).

There has been a reaction against the labelling of students as 'gifted' amongst some educationalists. Borland (2005), for example, argued that 'giftedness' was a social invention that served to divide society and argued that there should instead be a focus on developing techniques in education that would be advantageous to all students. Lambert (2010) has made a similar critique of the gifted and talented label. Whilst acknowledging that it is hard to see what the alternatives to having a construct such as 'gifted and talented' might be, as other options may be just as critically deconstructed, Lambert argued that the gifted and talented label was still 'a gross, misleading over-simplification of learners' abilities and potential' (Lambert 2010: 102). For example, Lambert believed that the label did not take into account the role of student personality, background, preference or the social environment of learning such as the cultural context, the physical environment or the teacher's perspective, all of which, he argued, could influence or determine how pupils responded to teaching and whether or not they were challenged at any one time. This was not a denial of the importance of stretching 'more able' students but based on a belief that it was more important to maintain a personalised approach to student learning:

> Only closer awareness and understanding of the qualities which pupils share, the diversity and fluidity of their differences, and their interaction within the social and cultural context of their learning, can lead to a less divisive and educationally positive approach for each and every learner (Lambert 2010: 103).

At the heart of Lambert's criticism was the idea that the term 'gifted and talented' encouraged the view that ability was intrinsic to the individual, preventing teachers from taking an active role in developing either their most rapid learners or their learners who could achieve the status of 'gifted and tal-

ented' with hard work and imagination. Lambert's work therefore reflected the work of psychologists who showed that specific abilities associated with achievement developed over time according to the amount of practice undertaken in mastering the domain specific knowledge and skills (Ericsson, 1996; Howe 1999).

Indeed, there is currently a concern that 'more able' students are still not receiving adequate provision in secondary schools and this is one of the key issues I am interested in in my role of 'more able' coordinator in an independent secondary level school. The Sutton Trust (Smithers and Robinson 2012) has argued that the UK government has not done enough to ensure that provision for 'more able' pupils is adequate in state schools and has identified three areas that would help to improve the provision for 'more able' students in UK schools. Firstly, the clarification of what constitutes top performance with a focus on major school subjects, as the Sutton Trust believe that there is already well-developed provision for those with exceptional ability in music and sport. Secondly, that there should be accountability for the provision for 'more able' students, to move schools away from concentrating on borderline or middling pupils. Thirdly, that reform for the age-group 11-16 should be made, as the Sutton Trust believes there is currently no progression measure for these five years. A recent publication by OFSTED (2015) that focused on the progress made by 'more able' students since June 2013 also criticised non-selective state schools for not having high enough expectations of their most able students or a KS3 curriculum and tracking system with sufficient rigour to enable the most able students to be challenged to achieve the highest levels of scholarship.

The same OFSTED (2015) publication spoke of 'more able' students in the selective and independent sectors achieving at higher levels than those in the non-selective sector, which implies that OFSTED believes non-selective state schools could be doing more to provide for their 'more able' students. However, independent schools may not necessarily be challenging their 'more able' students sufficiently. There is no evidence, for example, that independent, fee-paying schools are more educationally effective as this has not been a

focus of empirical study (Walford 2009). In a similar vein, the Sutton Trust (Smithers and Robinson 2012) recommendations for improvement could apply to any school context, whether selective or non-selective, state-funded or independent.

The area of 'more able' education is therefore one of current national interest as well as one of personal professional interest. It is also an area in which there is considerable scope for researching student perceptions as a way of developing effective provision for 'more able' students within schools. Do the students, for example, feel that they are being stretched and challenged appropriately, and is their progression being measured from 11-16 adequately? Furthermore, recommendations may be made to encourage more challenge within schools but recommendations do not address the issue of what teachers should do if the students do not wish to engage with more challenging work. As this study has two cohorts – 'more able' students forming the focus groups, whilst the questionnaires were completed by students from a wider group of students including those identified as 'more able' – it will be possible to gauge some of the perceptions of 'more able' students in relation to questions of how challenging they feel their work is from the focus group phase of the study.

## 2.2 National concerns about student academic achievement

The concern about whether the 'more able' are appropriately stretched and challenged is particularly important with the long-standing recognition that by providing for 'more able' students within the classroom, the attainment of all can be raised (Eyre 1997; Renzulli 1998). At the heart of the Sutton Trust (Smithers and Robinson 2012) and OFSTED (2015) publications is the concern that academic achievement of UK state-school students could be better.

Students, including 'more able' students and those in fee-paying schools, may currently be achieving high grades, but there is a concern that GCSE and A Level examinations are not hard enough (Coughlan 2012; Richardson 2013) and that UK students are actually lagging behind their contemporaries in other

countries in terms of their knowledge and skills (Smithers and Robinson 2012; Burns 2013). Although concern has been raised that these international comparisons should be treated with caution (Smithers 2013; Claxton and Lucas 2015), the 9-1 GCSE and A Level reforms that will have a staggered start from September 2015 are intended to ensure that the examinations are harder. This has given renewed impetus to the debate over the nature of teaching and learning in all UK schools (Walton 2014), including the independent sector in which I work. However, expressing concerns that UK students lag behind students in other countries, or by making examinations harder, does not address the issue of how to encourage students to engage with the more challenging work that these concerns and examination changes would necessitate.

## 2.3 Challenging work

In light of personal and national concerns that schools are not adequately stretching our students, including the 'more able', this study focuses on how girls in the selective independent sector perceive challenging work, positioning these perceptions within current theories of challenging work, deep learning and motivation. This section explores some of the definitions of, and value that has been attributed to, challenging work. It will be followed by a discussion of theories of deep learning. At the end of Chapter 3, both of these discussions will be contextualized within my overarching framework that synthesises perspectives of challenging work, deep learning alongside perspectives drawn from motivation theory.

It has been proposed that appropriate challenge within lessons is essential for better student learning, motivation and interest, leading to higher academic self-efficacy (Chae and Gentry 2011) but clear definitions of what challenging work is are hard to find.

Vygotsky's (1978) concept of a student's Zone of Proximal Development (ZPD) does provide a good starting point for a definition of challenging work. He claimed that a student's best learning takes place in the difference between

what a learner can do with help and what the learner can do without help – their zone of proximal development or ZPD. The ZPD could be seen as the definition of appropriately challenging work as it conveys the sense of a learner moving into a new area that is just beyond what they can do independently but which can be done without a teacher's help. Vygotsky's Theory of ZPD also leads to the idea that what constitutes challenging work will differ from individual to individual.

Bandura (1989) has shown the importance of challenging work in helping students to make progress. His study showed that challenging tasks offer important information about improvement and are consequently important for maintaining student self-efficacy, as students exert greater effort to master the challenge and therefore learn that they are capable of achieving at a greater level than before. Csikszentmihalyi's (1991) theory of optimal motivation has developed the importance of challenge in effective student learning with the recognition that students achieve 'flow' in their work, or a state of deep involvement, when the challenges of the task, their efficacy and skills are in balance. When combined, these theories suggest that the teacher must assess the skill level of the student in order to determine their ZPD and provide the 'optimal challenges' associated with student 'flow'. This indicates that a certain level of personalisation is required in each learning situation.

Recent empirical evidence has been produced to support the validity of these theories. A study by Chae and Gentry (2011) revealed insights into the extent to which students felt challenged and how this related to their learning. They asked 882 high-ability students in the USA and South Korea to complete a questionnaire about their perceptions of classroom quality. Five factors were measured using a five-point Likert scale: appeal, challenge, choice, meaningfulness and academic self-efficacy. Although the aim of the study was to consider whether there were differences between the two educational cultures, and the authors did note that the Korean culture meant that its education system was significantly different to the American education system, the study did reveal interesting insights into the extent to which students felt challenged in their classrooms. Chae and Gentry reported that the US students felt that

they had more choice and that their lessons were more meaningful, in comparison with their Korean counterparts. However, low mean scores were found in the area of challenge provided in the classroom, indicating that the students in neither country felt that their work was challenging. It was argued that this had an impact on student learning.

Hung et al. (2015) reported similar findings. They investigated the difference between the impact of challenging games and matching games on tablet PCs on student performance in science and the relationship of the games with student flow experiences. Fifty-two students with a mean age of 8 completed a 60-minute lesson of instruction in mathematics and science. The students undertook a pretest and a questionnaire (evaluating self-efficacy for science and technology), played the game and then completed a second test and questionnaire (evaluating their self-efficacy for science and technology, flow experiences, feelings about the game, and satisfaction with the learning approach). The matching games involved students clarifying concepts by matching correct answers and selecting correct items or calculations. In the challenging games, students were required to consolidate and elaborate concepts by completing progressive challenges. The authors reported that the challenging games on the tablets were better than the matching games on the tablets for improving learning achievement, flow experience and satisfaction. The authors also argued that the students were helped to solve problems by their teacher providing scaffolding, facilitating their ZPD. The researchers concluded that in order for students to maintain a flow state, the learning environment should provide sufficient support for them to meet the challenge of difficult tasks. Although it could be argued that the use of tablet PCs was integral to the motivation and 'flow' experienced by the students, this does not detract from the value of challenge within tasks.

## 2.4 Theories about deep learning

The proposal that appropriate challenge within lessons is essential for better student learning, motivation and interest (Chae and Gentry 2011) also leads us

to a consideration of what effective learning means. There have been several models proposed by educationalists to help teachers ensure that they instruct students in such a way to encourage deep and effective learning, supporting students in engaging with challenging work and thus facilitating progress, as well as the development of a breadth and depth in their knowledge. This section focuses on theoretical models of how teachers may provide deep engagement in challenging learning for all students.

Marton and Säljö (1976) were the first to coin the phrase 'deep learning'. They stressed the importance of students learning deeply as it meant that they focused on understanding material over memorizing material. In their study, two groups of 20 first year university students were asked to read three sections of a textbook. After the first two sections of reading, one group received questions that required a thorough understanding of the meaning of the passage whilst the other groups were given detailed factual questions. After the final section of reading, both groups were set the same set of questions as each other. This time the questions included ones that required a thorough knowledge of the passage as well as detailed factual questions. The students were retested in their knowledge 45 days later. The study reported that the students adapted their learning depending on anticipated task demands: those who had been in the first group and received questions that required a thorough knowledge of the text after the first two readings, focused on the meaning of the third reading and had a higher level of retention when retested, whilst those who expected the questions after the third reading to demand detailed factual material focused on the surface structure of the text did not score as highly in the retest. The authors labeled the type of learning that focused on understanding the meaning of the text deep learning strategies, and the type of learning that focused on the simple and easier recall of information, 'surface' strategies. Marton and Säljö's work would therefore indicate that deep learning underpins engagement with challenging tasks.

Many teachers are probably more familiar with Bloom's Taxonomy, an alternative but related framework for deep learning. Originally published in 1956 (Bloom et al. 1956) and then revised in 2001 (Anderson and Krathwohl et al.

2001), Bloom's Taxomony proposes six levels of thinking that students can be encouraged to move through as a way of ensuring effective differentiation within lessons: remember; understand; apply; analyse; evaluate; and create. Each level of thinking was deemed to be more complex, and therefore challenging, than the one before. Bloom's Taxonomy therefore takes further the application of Marton and Säljö's (1976) concept of deep learning as it shows that the type of task or activity set by the teacher encourages and guides students towards more challenging tasks.

The revised Bloom's Taxonomy changed the names and order of some of the categories of thinking, emphasising what students might do at each level: 'knowledge' became 'remember'; 'comprehension' became 'understand'; 'application' became 'apply'; 'analysis' remained the same; 'synthesis' became 'create'; 'evaluation' became 'evaluate' and was ordered before 'create' in the revised taxonomy. The revised taxonomy also relaxed the requirement of a strict hierarchy and allowed categories to overlap one another. The subcategories of the revised categories are as follows:

- Remember (retrieving relevant knowledge from long-term memory): recognizing; recalling.
- Understand (determining the meaning of instructional messages, including oral, written and graphic communication): interpreting; exemplifying; classifying; summarizing; inferring; comparing; explaining.
- Apply (carrying out or using a procedure in a given situation): executing; implementing.
- Analyse (breaking material into its constituent parts and detecting how the parts relate to one another and to an overall structure or purpose): differentiating; organizing; attributing.
- Evaluate (making judgments based on criteria and standards): checking; critiquing.
- Create (putting elements together to form a novel, coherent whole or make an original product): generating; planning; producing. (From Krathwohl 2002).

In relation to ‘more able’ students, it has been suggested that their tasks begin with the higher, more challenging levels of the taxonomy – analysis, evaluation and creative synthesis – in order to achieve the optimal difficulty required for engagement (Clinkenbeard 2012).

## 2.5 The relationship between challenging work, deep learning and more able students

Challenging work and deep learning have similarities in their nature. Both imply the need for students to stretch themselves beyond mere completion of a task or memorising information in order to understand material. However, the issue of understanding what appropriate challenge means and the factors that will encourage students to engage with this challenging work in the first place, and thereby engage in deep learning, remains under-researched.

Clinkenbeard (2012) has attempted to highlight the use of the TARGET model for supporting the motivation of ‘more able’ students to engage in challenging work and deep learning. This involves:

- Designing appropriate tasks of optimal difficulty, variety and which are presented with enthusiasm.
- Authority, where students have opportunities for shared decision-making in the classroom, enabling them to chose challenging projects.
- Recognition, where students are praised for accomplishment and improvement in new, challenging material; working in small groups with others of similar interests and achievement levels so that they spur one another on.
- Evaluation that is criterion-referenced and private; and the time attributed to each task has appropriate pace and workload.

However, Clinkenbeard’s proposal that this would be a good model for the motivation of ‘more able’ students still needs more empirical evidence, as

does the wider issue of whether this model will motivate students more generally to undertake challenging work.

There have been a couple of recent studies (Scager et al. 2014; Bennett 2014) that have indicated that students will undertake tasks that are considered to be challenging if they are presented in an appropriate way. These studies bear resemblance to the TARGET model.

Scager et al. (2014), for example, have argued that existing literature has not precisely defined what appropriately challenging work means for students. They studied an undergraduate course in Advanced Cell Biology that included a task where the students developed a research programme according to national scientific standards, which was regarded by an external jury of experts in the field to be challenging. Scager et al. reported that the interviews with teachers and students, analysis of course materials and observation of class meetings indicated that students' perceived learning peaked in a period of over-challenge, when their efforts increased despite a feeling of worry and frustration amongst the students. In discussing their findings, the authors proposed an alternative to Csikszentmihalyi's (1991) theory of 'flow'. They agreed that the balance between ability and challenge was important for enjoyment, as Csikszentmihalyi proposed, but that the balance between ability and challenge was not necessary for effort, persistence and learning. The authors defined the challenge of the research programme as the balance between the complexity of the task, the high expectations placed upon the students and the extent of direction given to the students by their teacher while they carried out their research.

Bennett (2014) also found that the conditions in which challenging work was introduced were important for the engagement of students. In an article that appeared in the teacher-led *Teaching Geography* journal, Bennett reported that her 'more able' KS3 students found the questions she created to enable students to exhibit higher order thinking a burden. These 'more able' students did not effectively engage with higher order thinking questions unless they were embedded in the compulsory elements of the lesson. When the tasks

were optional and placed on a wall display for students to refer to once their class work was complete, the students did not want to be seen to go up to the wall display for the challenging tasks. The engagement level of the students was higher when the higher order questions formed part of the key questions investigated during the lesson. Bennett also noted that the nature of the higher order questions she asked the students changed when they were embedded in the specific learning of the lesson: the questions became more specific. For example, the optional extension question 'Why does weather and climate vary from place to place and time to time?' became 'Why is the climate of Europe so varied?' Finally, Bennett found that by giving 'more able' students roles of responsibility and more autonomy during the lesson there was better engagement with the learning activity. This shows that the nature of the task and the conditions in which the task was to be performed was also important in engaging and motivating the students to undertake the more challenging task.

However, more empirical studies need to be carried out to test how widely the findings of Scager et al. (2014) and Bennett (2014) can be seen. This study attempts to address some of the gaps in the research by specifically seeking the views of girls aged 14-16, including those which have been identified as 'more able', of challenging work.

## 2.6 The relationship between challenging work, students in the independent sector and cultural capital

A reference has already been made to Bourdieu's view of cultural capital, the non-financial social assets passed down from parents to their children, such as education and style of speech that people deem worthy of being pursued (Bourdieu 1977). Bourdieu's ideas influenced Maxwell and Aggleton's (2014) study of cultural production and reproduction among members of the elite and upper middle classes educated in the independent sector. Maxwell and Aggleton found that the three domains of family (such as parental experiences, resources and aspirations for their children), the school, and individual girls' perception of the self worked together to shape how girls viewed their potential for academic achievement and their hopes for the future in terms of

their educational, employment and social success. This, in turn, shaped the actions of the girls in the present.

Maxwell and Aggleton's Bourdieusian understanding of social and cultural reproduction in the context of independent schools may be useful in explaining the propensity for students in independent schools to engage with challenging work. The role of the three domains of family, the school and individual girls' perceptions of their potential for academic achievement in shaping the girls' actions could influence the girls to take risks in their learning and complete more challenging work. The three domains could similarly cause them to avoid more challenging work. Maxwell and Aggleton's study therefore develops Exley and Suissa's (2013) view that the cultural capital that students in the independent sector are exposed to is more important than the schools themselves, as Maxwell and Aggleton placed emphasis on how cultural capital was shaped by more factors than solely parental influence.

Indeed, Maxwell and Aggleton argued that these processes of cultural and social reproduction were not always straightforward or unquestioning and there is clearly more research that could be carried out in this area. My study is focused on the student perceptions in girls' independent schools, with parental influence lying beyond the scope of this thesis. However, the suggestion that the perceptions of the girls towards challenging work are shaped by the domains of the family in addition to the school and the perception of self held by the girls, is useful when a consideration is made of the extent to which the findings of the study can be transferred beyond girls' selective independent schools. The perceptions of challenging work held by the girls in this study would not necessarily be held by students in other schools from a different socio-economic background.

Nevertheless, it cannot be assumed that all students in an independent school are from an elite or middle class background; some students may attend an independent school on a scholarship or bursary. The issues of independent schooling, the background of the students who attend such schools as well as their self-perceptions of themselves as learners, further indicates how the do-

mains identified by Maxwell and Aggleton, and their influence on student perceptions of challenging work, is complex.

## Summary

This chapter has discussed some of the key arguments surrounding private schooling and 'more able' education, offered some of the current thoughts on how challenging work and deep learning might be defined, and outlined some of the empirical evidence that has helped to develop or support these theories.

The next chapter outlines the key theories of motivation that underpin the study and discuss issues related to girls' approaches to studying, student perceptions of learning and their actions within a school-created learning culture. At the end of the next chapter, the research questions that have emerged from this theoretical outline are presented.

# Chapter 3: Motivation to engage with challenging work

This is the second of two chapters in which I seek to set out a theoretical framework for my study of student perceptions of challenging work and of factors they perceive motivate them to engage with it, amongst girls in the independent sector. In this chapter I outline the two theories of motivation that form part of the theoretical framework underpinning my study along with challenging work and deep learning: achievement-goal theory and expectancy-value theory. I will then discuss issues related to girls' approaches to studying, student perceptions of learning and their actions within a school-created learning culture, showing the extent to which they can help our understanding of student approaches to challenging work. Finally, I will show how the different strands of my theoretical perspective are linked together.

## 3.1 Theories about the role of motivation and fear of challenging work

The key issues for my study are how to engage girls in the independent selective sector so that they desire their activity to be directed towards more challenging tasks that lead to greater academic achievement – both in the short- and long-term – and that this pursuit is sustained and regular rather than spasmodic. To understand how to encourage this attitude amongst students, it is therefore important to understand the varying factors that motivate students to behave in particular ways.

Pintrich and Schunk have defined motivation as 'the process whereby goal-directed activity is instigated and sustained' (Pintrich and Schunk, 2002:5). Goal-directed behaviour is not observable directly but may be inferred from behaviour such as choice of task, effort, persistence and achievement. A number of motivational theories in the field of education have emerged that focus on the interplay of different factors that lead to student engagement, productivity and, ultimately, academic success. I have found achievement goal theory and expectancy-value theory to have particular resonance with my study,

which I will now outline in more detail. These motivational theories are cognitive theories of motivation and are linked with ideas around achievement orientations and goals. Some educationalists (e.g. Pintrich and Schunk 2002) subscribe to multiple theories, indicating that they should not necessarily be treated in isolation or as separate entities but that features of each can help to build a richer picture of the factors that motivate students to engage with challenging work.

### 3.1.1 Achievement Goal Theory

Achievement goal theory, perhaps the most dominant perspective in the study of achievement motivation, is a socio-cognitive theory of motivation that has been developed since the 1980s by a number of researchers, notably Midgley (e.g. 2002), Elliot (1999) and Pintrich (2000). Achievement goal theory focuses on the purposes of goals that are perceived or pursued in an achievement setting, centering on how students think about themselves, their learning and their performance (Midgley et al. 2008). From this perspective, the extent to which students are motivated by the goal to develop ability (mastery goal) or the goal to demonstrate ability (performance goal) or even the goal of avoiding demonstration of lack of ability (performance-avoid goal) affects how students interpret and react to events (Middleton and Midgley 1997). These mastery and performance goals are created by students within the environment of schools, which provide a goal structure through the messages students perceive their schools convey about achievement. This theory could therefore help to explain the extent to which students are prepared to engage with challenging work as their goal orientation could help explain the extent to which they are prepared to undertake more difficult tasks.

Considerable research has gone into developing scales such as PALS (Patterns of adaptive learning survey) to assess the achievement goals held by students of different ages and from a wide variety of socio-economic backgrounds (Midgley et al. 1998; Anderman and Johnson, 1998; Anderman, Griesinger and Westerfield, 1998), all of which give credence to this theory as a useful

way of understanding student motivation. PALS include a wide range of constructs for which students indicate their agreement along a five-point scale, such as their self-efficacy, their perception of school culture and their personal achievement goals.

#### *3.1.1.2 Achievement goals*

A number of different goals have been identified as part of achievement goal theory:

- Mastery or task-approach goals: students define success as mastering something new and see the effort that they put into the task as contributing to their success in the task;
- mastery-avoid goals: students try to avoid the loss or stagnation of skills or competence;
- Performance-approach goals: students wish to demonstrate their ability relative to others more than they wish to complete the task for the sake of their own learning;
- performance-avoid goals: avoidance forms of motivation that are grounded in fears of failure and focused on the possibility of a negative outcome.

#### *3.1.1.3 The 3x2 achievement goal model*

The 3x2 model is the most recent development of achievement goal theory (Vansteenkiste et al. 2014). First developed by Elliot et al. (2011), three strands of competence standards can be focused upon by an individual: task-based (how an individual is doing compared to the demands of the task e.g. getting an answer correct, understanding an idea); self-based (how one is doing compared to previous performance or has the potential to do in the future); and other-based (how one is performing compared to peers). Individuals can focus on attaining each of these standards or avoiding not to attain them.

In the 3x2 model, the following goals have thus been construed:

- task-approach
- task-avoidance
- self-approach
- self-avoidance
- others-approach
- others-avoidance

However, more empirical evidence is needed on this framework.

#### *3.1.1.4 Using achievement goal theory to predict student willingness to attempt challenging tasks*

From the emergence of achievement goal theory, mastery goals have been found to be linked to greater student willingness to try harder, persist for longer and to take on more challenging work. This is in contrast to performance-approach goals, which have been found to lead to a preference for less challenging, surface-level strategies such as rereading text, memorising and guessing.

Ames and Archer (1988), for example, carried out an early study of student perceived classroom environment and how this affected student motivation. Their study involved 176 students from a junior high school for academically advanced students in the USA, who responded to a questionnaire on their perceptions of goal orientation, use of effective learning strategies, task choices, attitudes and causal attributions. Students' scores on mastery and performance scales were correlated with learning strategy, task choice, attitude and attribution measures. When the students perceived an emphasis on mastery goals in their classroom, they reported using more deep learning strategies and a preference for tasks that offered challenge. In contrast, the students' perceptions of performance goal orientation were not related to their use of learning strategies or task choices. Hierarchically ordered regression analyses were used to assess the contribution of perceived goal orientation in relation to the contri-

bution of perceived ability. No interactions between perceived ability and goal orientation were seen, indicating that the highly significant effects of mastery goal orientation did not depend on the value or level of perceived ability. Ames and Archer's study can also help us to better understand the nature of challenging tasks. They argued that challenging tasks present the risk of failure, thereby threatening a student's sense of worth.

Current achievement goal research is based on Brophy's (2005) suggestion that goal theory should move beyond a consideration of performance goals. Based on emerging evidence that student responses to performance-approach scales are more reflective of their past achievement histories, Brophy argued that as performance-approach goals may be potentially productive in that they lead to better academic performance, they should be characterized as outcome goals or with another term that emphasizes achievement and not competition. This development was part of the move towards the 3x2 model of achievement goal theory. Elliot et al. (2011), for example, outlined the findings of two studies that they reported as indicating that achievement goal theory should be adapted: one with 126 German undergraduates and another with 319 undergraduates in the USA, all studying introductory level psychology. Participants in both studies were asked to complete questionnaires to assess their achievement goals and confirmatory factor analysis was used to test the 3x2 hypothesis. The researchers reported that the 3x2 model was a better fit for these students than the dichotomous or trichotomous models. Importantly, the 3x2 achievement model shows that approach-based goal pursuit is, in general, better suited to facilitate efficient and effective task engagement than avoidance-based goal pursuit, although more empirical research still needs to be conducted (Elliot et al. 2011). This holds similarity with the position taken by Elliot and McGregor et al. (1999) that performance-approach goals are similar to mastery-approach goals in the sense that both are grounded in the need for achievement and are focused on a positive outcome. With a more complex theory of achievement goals, the explanation behind why students are motivated to engage with challenging work may also be more complex than an explanation (e.g. Midgley 2002) that places mastery-approach goals solely at its heart. Further empirical research could be done in this area.

#### *3.1.1.5 The importance of learning strategies and student perceptions of intelligence in achievement goal theory*

Dweck and Master (2008) also developed achievement goal theory to show the importance of students having learning strategies as well as the motivation to apply them. This theory was based on Dweck's (1991) considerable work on theories of intelligence in which she has proposed that there are two views of intelligence: an incremental view of intelligence (intelligence and ability are believed to be malleable qualities that can be enhanced with effort); and an entity view of intelligence (intelligence is a fixed state that cannot be altered with effort or context).

Dweck and Master (2008) studied the impact of teaching Junior School mathematics students incremental theory in comparison to a control group of students who were given lessons in study skills. The group who were taught incremental theory were taught about how the brain forms new connections every time it learns something new and they engaged in activities that illustrated the concept. For example, the students discussed times when something had been hard for them but they had nevertheless mastered it through effort, subsequently becoming good at it. This group learnt how to apply the incremental concept to their schoolwork when they experienced difficulty and were tempted to give up. After the intervention period the group that had been taught incremental theory saw an improvement in their mathematics scores and their teachers reported a change in how these students self-regulated their learning by, for example, handing in work early so that they could obtain feedback and make revisions. The researchers concluded that students with a fixed or entity view of intelligence do not take active charge of their learning as they do not see any point in doing so. From this perspective it was proposed that students who perceive that they are of high ability would not see a need to develop strategies to master new material. In contrast, students who perceive themselves to have low ability would theoretically regard effort and strategy as ineffective. However, the research carried out by Dweck and Master suggests that if students hold a malleable or incremental view of intelligence they may be prepared to regulate and motivate their own learning process, as they

would, according to this theory, believe that it is possible to develop and thereby achieve. An incremental view of intelligence would therefore seem to be an important precondition for student engagement with challenging work. Without the belief that it is possible to learn from and achieve through completing a particular task, they may not engage in challenging tasks.

Dweck and Master proposed from their study that the malleable view of intelligence can be taught or encouraged, and that it can be changed with targeted interventions, indicating that the school does play a role in determining the extent to which students are prepared to engage with challenging work.

#### *3.1.1.6 Limitations of achievement goal theory*

Achievement goal theory still has a number of critiques that have not been resolved through empirical study, indicating that this approach to explaining student motivation is not yet fully understood. For example, the extent to which students switch goals is undeveloped; and the most recent development of achievement goal theory, the 3x2 model, is in its early stages of empirical research with much of the research conducted on university undergraduates. Thus there is a need for studies with a greater age range of students (Elliot et al. 2011). Furthermore, more empirical research could be done into why performance goals have been found to influence test score achievement whilst mastery goals do not seem to do so (Senco et al. 2011), a situation which may help to explain why some students choose to follow performance goals over mastery goals.

It has also been argued that achievement goal theorists often do not place equal emphasis on the individual goal orientations held by students in addition to those created in, or influenced by, the classroom or at school level (Kaplan et al. 2002). This means that other motivational theories, which have links to and parallels with achievement goal theory, can also be used to build up a more complex picture of the different motivational factors that can help to explain the extent to which students are prepared to engage with challenging

work. Expectancy-value theory, which I will now outline, has links to achievement-goal theory but also offers a richer understanding of motivational factors that is useful in helping us to understand student engagement with challenging work.

### 3.1.2 Expectancy-Value Theory

Expectancy-value theory is concerned with the extent to which students perceive value in their learning activities and think they will do well in such a task. For example, if a student believes that the task is worth doing and has an expectation that he or she is able to do it, he or she may be more likely to attempt the task. Conversely, most individuals will not choose to do a task or continue in that task when they expect to fail (Pintrich and Schunk 2002).

This motivational theory links with achievement goal theory as it helps to explain why individuals make decisions about the motivational goals they choose to pursue. It also has links with Vygotsky's (1978) ZPD, and therefore challenging work, with its reference to students moving into a point whereby they believe that they will not be able to complete a task. This is similar to Vygotsky's idea of moving beyond the zone of proximal development where there is some familiarity for the student into an area which is completely new for the student.

There is evidence that students who believe they can do a task and expect to do well in it are more likely to achieve at higher levels, be more cognitively engaged, and try harder and persist for longer at the task (Pintrich and Schunk 2002). For example, Anderman, Eccles and Wigfield et al. (2001) have shown that student self-perceptions of ability and their expectations of success were the strongest predictors of subsequent grades in Mathematics and English, their effort and their persistence. The researchers posed the question of why some students valued mathematics and reading whilst others did not and investigated the relations between mastery and performance-oriented institutional practices on changes in student achievement values in mathematics and

reading. They asked 570 students from 12 US schools in the third and fourth grade to complete a questionnaire at the same time in two consecutive years. The questionnaires measured their subjective task values and competence beliefs in a variety of subject domains, such as mathematics, reading, sport and instrumental music along a 7-point Likert scale. Their findings showed that students who perceived themselves as being good, competent students generally experienced positive changes in achievement values towards their various subject domains: a positive self-image was translated into positive attitudes and beliefs about the subject area.

This is a valuable motivational theory as an explanation of the extent to which students are prepared to engage with challenging work. Expectancy-value theory helps us to understand the perceptions of challenging work held by secondary school students as it shows the link between student self-perceptions of ability and expectations for success are linked to the effort and persistence shown by students in the completion of challenging tasks. A consideration of how students perceive themselves and the value they ascribe to certain learning activities would help schools to support students to recognise the long-term value of tasks that may not naturally be of intrinsic interest – for whatever reason - to their students (Clinkenbeard 2012). There is, however, a lack of empirical study into whether expectancy-value theory can be used to explain the extent to which girls in the selective independent sector will engage with challenging work.

## 3.2 Student use of learning strategies: student perceptions and actions within a school-created learning culture

At the heart of the motivation theories and how they might be applied to student willingness to engage with challenging work, is the belief that teachers and schools play an essential role in helping to create and shape the perceptions and subsequent actions of students. There have, however, been few studies on the perceptions of studying that young people hold or of the different types of study skills that they use (Rogers 2013).

In relation to achievement goal theory, Midgley (2002) proposed that educators need to assess the perceptions of their students regarding their achievement goals and the goals that are created in school. As goal structures are primarily subjective constructions based on the perceptions of students, information about what students perceive about challenging work could help schools to see whether there is a predominance of approach goals or avoidance goals amongst a particular group of students.

In their study into student self-perceptions of ability and their expectations of success in mathematics and reading, Anderman, Eccles and Wigfield et al. (2001) considered the impact of instructional practices on student perceptions of the value of mathematics and reading. They asked the class teachers to complete a questionnaire examining their beliefs and classroom practices: their self-reported use of mastery-oriented instructional practices (such as focusing on one's own improvement, choosing or initiating individual projects, and attempting challenging projects even when faced with difficulty) and performance-oriented instructional practices (such as working for the top grades in class, knowing who is doing best and striving to do as well, achieving high test scores). They reported that classroom practices predict changes in students' overall valuing of mathematics and reading, and that performance-oriented instructional strategies can be linked to changes in the valuing of both reading and mathematics. Amongst the students who had teachers that reported they used performance-oriented instructional practices, there was a decrease in the valuing of mathematics and reading. However, the use of mastery-oriented instructional practices was found to be unrelated to changes in achievement values in mathematics and reading. The authors argued that this might be because the students interpreted the instructional practices of their teachers differently, noting this as an area for future research.

Rogers' (2013) study of how students use learning strategies and how this relates to academic success provides a valuable context of the underlying factors in perceptions of studying amongst 16-year-old students. She surveyed the views of 826 Year 11 students from eight schools that reflected a range of ability levels in outer London and found that school students approached their

GCSE studies in a similar way to students in higher education. Where students perceived studying to be concerned with understanding, there was a significant positive relationship with attainment. She consequently recommended that teachers of adolescents could learn from the range of interventions that have taken place in higher education in order to encourage students towards a deep approach to learning and better study skills as this would potentially lead to increased levels of academic success. For example, Rogers argued that assessment procedures and approaches to teaching and learning that encourage a deep approach to learning rather than rote-learning or cue-seeking could lead to greater academic success.

However, there is still a need to investigate why students do not take a deep approach to learning in schools. Is it the nature of the work given, the context teachers create, or the perceptions of the examinations that the students know they will be taking that affects their motivation and willingness to engage with challenging work? Interestingly, Rogers (2013) found that an increase in understanding led to an increase in average GCSE point score, but that anxiety – perhaps caused by proximity to examinations and identified by Rogers as sharing similarities with surface learning – also led to an increase in point score. This was the opposite of the impact of surface learning in university students, which had led to lower attainment. Wider interest in a subject, which Rogers identified in the traits of self-confidence and a preference to explore one's own ideas, also led to a lower average GCSE points score, indicating that this was a disadvantage in the context of GCSEs and the specific assessment required. Perhaps the differences in the nature of GCSE courses and university degrees would need to be studied more fully to understand why there are these different outcomes.

However, Rogers' recommendations do suggest that a deeper understanding of the attitudes and perceptions with which adolescents approach their learning in schools would be useful in helping teachers to 'bridge' the gap between adolescents' attitudes towards learning and those of students in higher education. This could help teachers move the school students towards this deeper

approach to learning through engagement with more challenging work with the goal of an increase in student academic success at GCSE and beyond.

If schools and teachers play a significant role in creating the learning cultures in which students operate and therefore help to determine student attitudes towards failure (Ames and Ames 1994), their goal motivations (Kaplan et al. 2002), the extent of their self-regulatory actions (Pajares 2008) and therefore academic success of students, it would be important for teachers to seek to understand what student perceptions of challenging work are. Lee and Reeve (2012) have found that teachers are able to accurately gauge students engagement in tasks but are not as accurate in gauging student motivation. There is thus room for the development of student voice within schools so that there is greater awareness amongst teachers and school leaders of the perceptions about challenging work that students hold. This sits firmly within the recommendations of proponents of achievement goal theory, such as Kaplan et al. (2002), who point out that goal structures are primarily subjective constructions based on the perceptions of students; and of expectancy-value theorists, who place emphasis on giving students the opportunity to explain their views, followed by a survey of their attitudes (Pintrich and Schunk 2002).

## 3.3 Issues of gender: girls' approaches to studying

Finally, issues related to girls' approaches to learning might affect the perceptions of the students who took part in my study. This necessitates a brief overview of current thinking of how the two themes of 'more able' and 'girls' combine to create a peculiar situation in which the students in my study may find themselves when deciding whether to engage with challenging work.

In their study of 310 Year 10 and Year 11 students in two single-sex, high-achieving selective schools, Rogers and Hallam (2006) found that girls did not adopt such successful learning strategies in their approach to examinations as boys. The girls felt more strongly that there was so much to cover that they did not know what to learn; they indicated more strongly that they adopted

more variable ways of revising and that they felt that they did not do their best in examinations. Boys, on the other hand, were more positive in their approach to examinations and less anxious about them, did less homework and achieved similar results to girls. The authors reported that the high-achieving girls might engage in more surface approaches to studying for examinations than the high-achieving boys owing to their levels of anxiety. They proposed that this may be because girls may have less confidence in their ability and lower self-esteem (Dweck et al. 1978; Murphy and Elwood 1998) or that boys had lower anxiety levels because they have more of a 'risk-taking' approach (Elwood 1998).

Meece and Painter (2008) found that girls approached learning tasks with a stronger mastery orientation than boys, and girls also expressed more efficacy than boys for self-regulation, whilst Eccles and Wigfield (Anderman, Eccles and Wigfield et al. 2001) found that gender was unrelated to changes in the valuing of mathematics and reading. With reference to the latter, these findings may be owing to the age of the students, as the authors noted - their study involved elementary school children. However, the observation that girls tend to have lower self-perception of ability than boys and yet tend to perform more highly (Pintrich and Schunk 2002) introduces an interesting conundrum. The lower self-perception of ability amongst girls may affect the readiness of girls to engage with challenging work, whilst the fact that they still tend to achieve highly may mean that the issue of the girls' lower self-perception of ability is perhaps not always recognized and addressed within schools. This indicates that there is still scope to consider how high-achieving girls perceive their learning.

However, the attention that Rogers and Hallam (2006) have brought to the issue of how anxiety may affect high-achieving girls in a selective school in Years 10 and 11 is important. Student perceptions about their learning may indicate that there is a link between student attitudes towards challenging work and the extent to which they undertake it.

## Summary and research focus

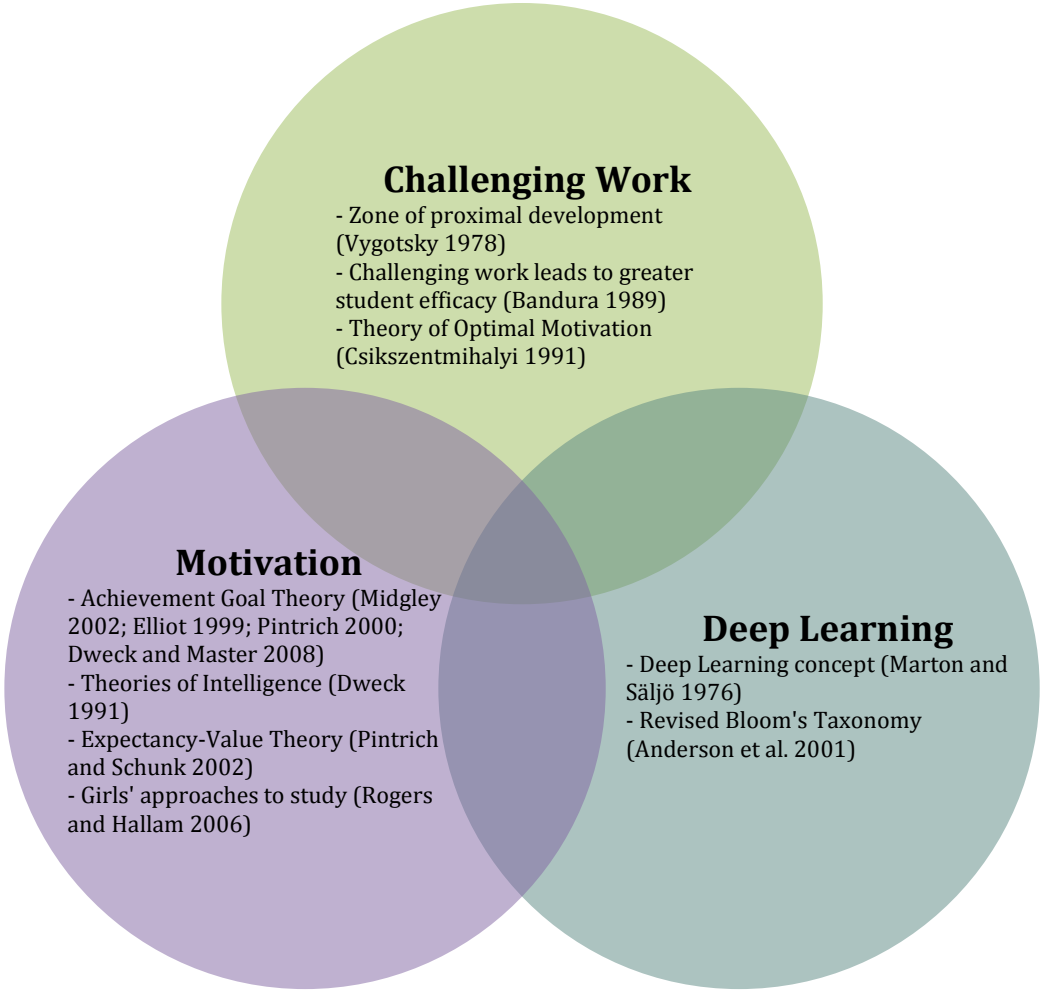
This chapter has presented the key motivational theories and related research – achievement goal theory and expectancy-value theory - which together with the research into 'more able' education and theories about challenging work and deep learning outlined in Chapter 2 provide a theoretical background for my study of the perceptions of girls in the selective independent sector towards challenging work.

The idea that challenging work is essential for better student learning, motivation and interest (Chae and Gentry 2011) would seem to suggest that the discovery of what constitutes appropriately challenging work for students, and of the factors that would motivate them to engage with it, would help to address the current concern that students in UK schools, including the 'more able', are not being adequately stretched or challenged. There is scope to explore the perceptions of students of the extent to which they feel they are appropriately challenged in their learning as well as the factors that might motivate them to complete more challenging work. For example, the role of student effort and persistence in student decisions to engage with challenging work (Scager et al. 2014), and of how to secure and channel towards challenging work through establishing the appropriateness of tasks and conditions in which the tasks are completed (Bennett 2014). More research could also be done in the independent sector, as this is an area that is often generalised about but is not often the subject of empirical research.

## Conceptualisation of my theoretical perspective

Chapters 2 and 3 have shown that from my initial interest in why students were not always prepared to work on challenging tasks, my study took me into the related areas of deep learning and motivation. I am interested in the intersection between these three perspectives, the connections between which are shown in **Figure 3.1**, as an explanation of why girls are prepared to engage with challenging work. This can be summarised as the central point in diagram, where student perception of the level of challenge within tasks combines with how teachers encourage deep engagement with challenging tasks, and with the achievement goals and expectancy value of the tasks perceived by students.

## Figure 3.1 Conceptualising my theoretical perspective



## Research Questions

My research investigates what challenging work means to girls in the selective independent sector in the years immediately preceding and leading up to their first national public examinations at GCSE; in other words, the transition from KS3 to KS4, or school Years 9, 10 and 11.

I have developed three research questions from the literature and from personal practice and experience, which explore the issue in depth. The three research questions I have designed have strong links to discovering the perceptions of students of what challenging work means to girls in the selective independent sector as well as exploring the reasons they identified as factors that motivated them to engage with challenging work.

As teachers in my school were reporting a difference in the willingness of students to undertake challenging tasks in Years 10 and 11 in comparison to younger year groups, I decided to focus on the transition from KS3 into KS4 to see whether there were contextual differences in factors associated with motivation to complete challenging work between the Years 9, 10 and 11 as this is the stage where students in the independent sector generally move from not studying for externally assessed examinations in Year 9 to preparing for their GCSE examinations in Years 10 and 11.

1. **What do girls in the transition between KS3 and KS4 in the selective independent sector perceive as challenging work and is this linked to theories of deep learning?**

2. **How do girls in the transition between KS3 and KS4 in the selective independent sector feel about the level of challenge in their current work?**

3. **Are there specific motivational factors or factors in the classroom environment that are associated with girls' readiness to engage with challenging work in the particular Key Stages of KS3 and KS4?**

The next chapter outlines the methodology and research methods followed in the study to answer the research questions.

# Chapter 4: Research Design and Methods

In this chapter I outline how my ontological and epistemological positions have informed the decisions I made regarding the collection and analysis of data for this study of girls' perceptions of challenging work in the selective independent sector. I will then describe the focus group interviews, transcription and analysis; the construction and process of the questionnaire that was created following the focus groups; and the data analysis process.

## 4.1 Theoretical perspective

From an epistemological perspective, I subscribe to an interpretivist paradigm (Crotty 1998). As such, I seek a 'culturally derived and historically situated interpretation' (Crotty 1998: 67) of student perceptions, interpreting their responses within a snapshot of time. I recognize that there are multiple constructions of reality depending on how individuals interpret and engage with the world and that this means that the data that is collected was based on a subjective reality of their perceptions. The data was the product of an interaction between the students and the questions that I asked them as well as the product of my own interpretation (Mayoh and Onwuegbuzie 2015).

I feel that small studies can enable individual student voices to shine through and that this helps to shed light on more complex phenomena, even if I am never able to claim that the views of the students involved apply across multiple settings without engaging in further study.

## 4.2 Mixed Methods

A mixed methods approach was followed in the study, as the research questions were too complex to rely on a single method or technique (Kington and Salmons et al. 2011). I wanted to explore what girls in the transition between KS3 and KS4 perceived about challenging work from their own perspective, which would involve speaking to a smaller number of students. But to ascer-

tain how widely held the views of the focus groups were, I needed to seek the views of a larger number of students.

The mixed methods approach draws upon positivist ideas about what knowledge is and how it is constructed, as well as an interpretive perspective (Harrits 2011). The interpretive perspective can be seen in the focus groups that were held, where the views of the 'more able' girls about challenging work were taken into account. This ensured that the voices of the students were what guided my research (Pintrich and Schunk 2002). From the student responses during the focus groups, the statements of a questionnaire were developed. The questionnaire integrated a scientific objective perspective (positivist) with the interpretive perspective of the focus groups, providing a measure of the extent to which the attitudes and beliefs captured in the focus groups were shared more widely amongst whole year groups, across three schools (Harrits 2011; Westerman and Yancher 2011).

The design of the study was sequential in that the findings from the focus groups fed into the questionnaire design (Tashakkori and Teddie 1998; Kington and Salmons et al. 2011). But as the qualitative element of the study (focus groups) was the basis of the quantitative element of the study (questionnaire), the research design was also 'dominant-less dominant' mixed method design (Tashakkori and Teddie 1998). The data was first of all collected from the focus groups and then the themes about challenging work that emerged from the focus groups were explored further via the questionnaire.

In this way I was able to use the quantitative data from the questionnaire to supplement (Harrits 2011) and build upon the picture created by the qualitative focus group responses. The mixed methods approach enabled me to study the perceptions of able girls towards challenging work as well as the extent to which a wider body of students in the selective independent girls' schools held the perceptions of 'more able' students towards challenging work.

### 4.3 Schools involved in the study

The focus groups were held at my own school. The questionnaires were then completed at my school and at a further two schools where I knew members of the Senior Leadership Teams. Each of the schools were very similar in terms of examination results, the profile of the students, and their aims, objectives and aspirations they held for their students.

All three schools were independent girls' schools in North London or close proximity, and used some form of selection when deciding upon their intake. One school was a small school and two were of medium size. Further details of the schools can be found in **Table 4.1**.

## Table 4.1 Information about the schools involved in the study

| | School A | School B | School C |
|---|---|---|---|
| **Total number of students on roll (3-18)** | 950 | 281 | 746 |
| **Number of Special students not under a SEN statement** | 36 | 41 | 31 |
| **Percentage of students achieving 5+ A*-C at GCSE in 2013** | 100 | 80 | 99 |
| **Year 9 students who took the survey** | 24 | 20 | 19 |
| **Year 10 students who took the survey** | 16 | 31 | 17 |
| **Year 11 students who took the survey** | 17 | 29 | 19 |

## 4.4 Focus Groups

### 4.4.1 Purpose

The purpose of the focus groups was to ensure that the voices of the students guided the research (Pintrich and Schunk 2002): their perceptions about how challenging work should be defined, how they perceived their responses to challenging work and the factors they believed motivated them to engage with challenging work. From the focus group responses, the questionnaires were created.

### 4.4.2 Development of the Focus Group Questions

Questions were drawn up beforehand to guide the conversation. **Table 4.2** indicates how the questions were linked to the literature and to my research questions. The focus group questions were designed to survey girls' goal orientations and attitudes to different aspects of learning such as the level of difficulty or 'challenge' they perceived in their work, the factors that enabled them to enjoy school and to achieve, and their perceptions of the messages about learning that they received from their parents and teachers.

## Table 4.2 Focus group questions with rationale

| Focus Group Questions | Rationale | Research question |
|---|---|---|
| Can you describe what the phrase 'challenging work' means to you? | ***To find out how they understand the phrase, including how they would define challenging work in the classroom. This could help to determine the variety of views the students had about different types of work that they find challenging and whether this equated with difficulty.*** | 1 |
| What does 'challenging work' look like in the classroom? Do your teachers tell you that work is challenging? | ***Built on the previous question if they had not already given a clear definition of what challenging work looks like to them in the classroom. To add clarity.*** | 1 |

| | | |
|---|---|---|
| On a scale of 1 to 10 with 10 being the highest, how difficult is the schoolwork you are currently given to complete? | ***To determine how far they felt they were being challenged in the classroom and whether they perceived the work to be too hard for them or pitched at the right level.*** | 2 |
| Would you like your schoolwork to be easier or harder? Why? | ***Built on the previous question by asking the students to reflect on whether they wanted the difficulty of their current work to be increased or not. It might help to indicate something about the level of their performance orientation.*** | 2 & 3 |
| Can you describe when you find work most difficult to complete? What type of work is most difficult? | ***Built on the question of what challenging work might look like in the classroom but it was also to encourage clarification of their perception of challenge in their current work.*** | 1 & 2 |
| What factors make you more likely to attempt challenging work? | ***To indicate what the students perceived as motivating factors in their learning and possibly of their goal orientations.*** | 3 |
| How often do you complete extension tasks? | ***To gauge goal orientations and also to see whether they equated extension tasks with challenging work and the extent to which they were likely to complete such tasks.*** | 2 & 3 |
| Can you describe how your teachers talk about learning or schoolwork with you? | ***To explore student perceptions of the learning environment created by their teachers.*** | 3 |
| Can you describe how your parents talk about learning or schoolwork with you? | ***To discover what influence students perceived their parents had over their approach to their learning.*** | 3 |
| Does your approach to work in lessons differ from your approach to homework? | ***To ascertain how students felt they behaved when being directed in their learning in the classroom as opposed to when they had more independence at home. It was hoped that this would begin to indicate some of their goal orientations.*** | 3 |
| Does your approach to homework differ from your approach to studying for exams? | ***This asked students to comment on their approach to studying for examinations. A difference in approach may indicate something of their goal orientation and what motivated them to study.*** | 3 |
| Do you notice a difference in the standard of work you complete this year compared to last year? | ***This question was just asked to Year 10 students to see whether they perceived a difference in the work that had been given to them as part of their GCSE courses compared to the work they had been given at Key Stage 3.*** | 2 |
| (KS4 only) Can you describe how you feel about GCSEs? Does this affect your approach to your learning? | ***To provide further information about student goal orientations but only asked to the Year 10 Focus Groups as they had started all of their GCSE courses (Year 9 had only started their Science courses and I felt that this may not have had an impact on their learning across all of their subjects).*** | 3 |

| | | |
|---|---|---|
| Can you describe how you made your GCSE choices? | ***To ascertain their goal orientation and what motivated them to perform i.e. were the students choosing subjects based on perceived difficulty and how this might affect their grades or in the perceived value of the subjects?*** | 3 |
| (Year 9 only) Can you describe how you feel about starting your GCSE courses next year? Does this affect your approach to your learning? | ***This question was just asked to Year 9 students to see whether they had any feelings about starting their GCSE courses and whether they felt that this might mark a change in their attitude towards their learning in Year 10.*** | 3 |
| What's more important to you, understanding or attainment? | ***Linked to goal orientations and what the students perceived about the relative value of understanding and attainment.*** | 3 |
| How do exam results alter your attitudes towards your learning? | | |
| What would help you to achieve more highly at school? | ***To ascertain different factors the students perceived as helping them to perform – was it about the input the students put in or was their performance more affected by external factors?*** | 3 |
| What would help you to enjoy your time more at school? | ***To offer the students the opportunity to comment on whether they enjoyed school or whether they perceived school as being a place where they felt pressurized or stressed.*** | |

### 4.4.3 Sampling

The students invited to take part in a focus group were from Year 9 and Year 10 in my school and had to appear on our Whole School More Able Register for more than one subject. The Whole School More Able Register contains the names of students that every department has identified as being 'more able' in that subject in comparison to their peers in the same year group. Each department decided what the specific characteristics of an able student are for their subject, but they were provided with general characteristics of 'more able' students and had access to Midyis data to inform their identification of 'more able' students. Departments were asked to identify between 5-10% of the year group as being 'more able' as this was the recommendation of the DfES (OFSTED 2001).

Students from the Whole School More Able Register were invited to take part in a focus group because, as 'More Able' coordinator, I wanted to hear the views of these students separately from their peers so that I could gather their perceptions about the level of stretch and challenge in their current work. The subsequent questionnaires that were formed from the comments made by the 'more able' students would then reveal how widely felt their perceptions of challenging work were held by other students in Years 9, 10 and 11.

Details of the numbers of students that were involved in the focus groups can be found in **Table 4.3**.

## Table 4.3 Details of Focus Group participants

| | **Number of students** |
|---|---|
| **Year 9 Focus Group 1** | 3 |
| **Year 9 Focus Group 2** | 3 |
| **Year 10 Focus Group 1** | 7 |
| **Year 10 Focus Group 2** | 4 |

### 4.4.4 Procedures

The focus groups took place over two weeks during June and July 2013 and were recorded on a laptop using the Garageband software. The focus group questions were trialled in the first focus group that was held, but as the data were so rich I decided to use this for the study. The students were able to discuss each of the questions in detail, leading to data that I wanted to include in my analysis; I did not want to 'waste' the insights that had been provided by the student responses. Each of the subsequent focus groups followed the same procedures as the first, pilot focus group.

Before the focus groups commenced, the students were reminded of the purpose of my research, the process of the focus group interview and that they could withdraw at any stage; for example, by not making a comment during the focus group or by leaving the room. They were also told that they did not need to answer any of the questions if they did not wish to.

The focus groups were semi-structured, enabling the students to take the conversation into unexpected areas, although the conversations were based on the pre-designed themes related to my research questions. The option of being able to ask the participants to clarify their answers during the focus group also aided the accuracy of my later analysis of the meetings (Dowling and Brown 2010). However, during the focus groups I found that I rarely asked additional questions to prompt student responses. 'Probes' were used occasionally to gain further information/clarification. 'Prompts', where I suggested possible responses, were used infrequently, mainly when students were unsure of the meaning of the question; or accidentally, in the case of instances when I asked a question for the first time and did not give students enough 'thinking time' before expecting a response. These 'probes' and 'prompts' were not considered in advance (Dowling and Brown 2010), apart from my decision to limit my questioning as much as possible to allow the students to respond to the questions and the responses of the other group members without excessive intervention by myself.

I did find the presence of more than one student helped me to assess where there was a degree of agreement between the students in their responses to the questions, which then helped me to evaluate statements for inclusion in the subsequent questionnaires (Robson 2002). This was a strength of using focus groups over student interviews. However, the issue remained of students potentially saying what they thought was required rather than what they actually thought. Furthermore the dynamics of the group could have determined who spoke as well as what they said. Whilst participants could provide checks and balances on each other, which meant that there should not be too many extreme views at the end of the focus group, the potential, hidden power relationships within the group may have affected how much the individuals

spoke. I could therefore never know the real strength of student views or whether a consensus was really held (Robson 2002).

### 4.4.5 Ethics

To obtain the informed consent of the students involved in the focus groups, a meeting was held during morning break the week before the focus groups were to take place where the purpose of the research was explained to the students as well as offering them the opportunity to ask questions. The students were then invited to sign up for a focus group so that I could see the feasibility of the days I had chosen. It was made clear that this did not commit the students to the focus group and that they would not be chased up if they no longer wanted to be part of the process. The parental and student consent forms were given to the students at this stage. These forms contained information about the nature of the data that would be created, how it would be stored, and how it would be used. The students had to return both of the consent forms, signed, either before or on the day of their focus group.

Not all of the invited students were able to attend this meeting. Some students requested the information to be given to them after the meeting and went on to be part of a focus group. The purpose of the research was repeated to these students before the focus group started so that they were fully informed.

Both the parent and student consent form contained the proviso that full anonymity could not be completely guaranteed (Dowling and Brown 2010). However, to protect their identities as far as possible, the names of the students on the transcriptions of the focus groups were replaced by letters so that their responses cannot be identified by anyone else. Responses will not be attributed to individuals in the thesis.

Approval was sought and granted from the ethics committee at the Institute of Education. The documentation can be found in **Appendix 2**.

### 4.4.6 Analysis of the Focus Groups

Transcriptions were made of the focus groups using Word and then checked against the recordings for accuracy. Only the words that the students said were transcribed, with the occasional pause noted, rather than other features such as tonal inflections. This was because I was interested in what the interviewees said – their perceptions of learning, of what motivated them and of the type of teacher and parental language they perceived - rather than how they said it. (Fairclough 2003)

To facilitate analysis, the questions that were asked during the focus groups were categorized into topic areas:

1. **Definitions of 'challenging work' and what it looks like in the classroom**
2. **How 'challenging' do the students perceive their current work to be?**
3. **Factors that motivate students to attempt 'challenging work'**
4. **How students perceive messages from teachers and parents?**
5. **How do GCSEs affect student perceptions of their learning?**

The text was then coded under these topic areas and thematically analysed using Word. The data were scoured for initial themes that were applied and then checked for applicability to the data set. The analysis was therefore to some extent inductive, as I did not apply a pre-existing coding framework. However, the analysis did not take place in a 'theoretical or epistemological vacuum' (Braun and Clarke, 2006: 84) as the focus group respondents had given their responses to questions I had composed, grounded in the literature concerned with the area of challenging work.

### 4.4.7 Validity and Reliability

As I was the one who decided which information was important to be selected as themes, the analysis of the focus group data was therefore subjective (Braun and Clarke 2006). As the participants were not involved in my analy-

sis of their responses it could be argued that a power imbalance occurred (Yardley 2000). However, the validity of the analysis of the focus groups lies in the fact that I was remaining sensitive to the context of my participants within the framework of my research questions by searching for themes in the data rather than coming to the analysis process with predetermined ideas of what these themes might be, (Yardley 2000).

### 4.4.8 Limitations

It could be argued that because the focus group participants were from the Whole School More Able Register, they did not reflect the wider student body and are therefore limited in their ability to reveal student perceptions and motivations surrounding challenging work. It could also be claimed that focus groups might be dominated by one or two people, thereby causing extreme views to predominate (Robson 2002). This was why a questionnaire was also developed, as it would enable me to see how widely held the views of the focus groups were.

## 4.5 The Questionnaire

### 4.5.1 Purpose

The purpose of the questionnaire was to collect data that showed the extent to which the attitudes and beliefs captured in the focus groups were shared more widely amongst whole year groups, across a wider sample.

### 4.5.2 Development of the Questionnaire Questions

When devising the questionnaire, I aligned the questionnaire items with my research questions, my theoretical framework and the themes that emerged during the focus groups. These focus group themes formed sections of questions in the questionnaire. The framework for the questionnaire is set out in **Table 4.4**.

## Table 4.4 Plan of questionnaire questions in relation to the research questions

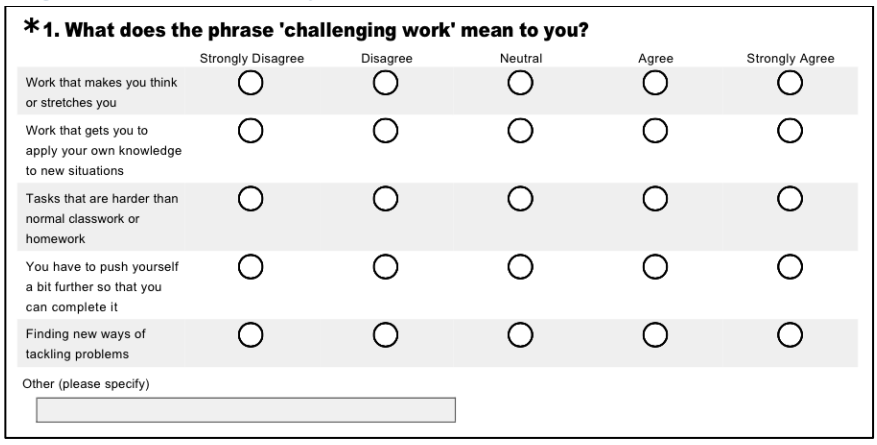
| Theme | Research Question |
|---|---|
| **Theme 1. Definitions of 'challenging work' and what it looks like in the classroom** | |
| What does the phrase 'challenging work' means to you?<br>What does 'challenging work' look like in the classroom? | 1 |
| **Theme 2. How 'challenging' do the students perceive their current work to be?** | |
| On a scale of 1 to 5 with 5 being the highest, how difficult is the schoolwork you are currently given to complete?<br>Would you like your schoolwork to be easier or harder?<br>If you would like your schoolwork to be easier, why is this?<br>If you would like your schoolwork to be harder, why is this?<br>Do you notice a difference in the standard of work you complete this year compared to last year?<br>On a scale of 1 to 5 with 5 being the highest, how much do you enjoy the schoolwork you are currently given to complete? | 2 & 3 |
| **Theme 3. How students perceive messages from teachers and parents** | |
| How do your teachers talk about learning or schoolwork with you?<br>How do your parents talk about learning or schoolwork with you? | 3 |
| **Theme 4. How do GCSEs affect student perceptions of their learning?** | |
| How did you make your GCSE choices? (Question to KS4 only)<br>How do you feel about GCSE examinations? (Question to KS4 only)<br>How do you feel about starting your GCSE courses next year? (Question to Year 9 only) | 3 |
| **Theme 5. Factors that motivate students to attempt 'challenging work'** | |
| What type of extension tasks do you prefer to complete?<br>How often do you complete extension tasks?<br>What factors make you more likely to attempt challenging work?<br>What's more important to you, understanding or attainment?<br>How do test results or homework grades alter your attitudes towards your learning?<br>What would help you to achieve more highly at school?<br>What would help you to enjoy your time more at school? | 3 |

When deciding how the questions would be phrased and structured, I went back to focus group responses for the phrasing of questions and created the options of responses from those given by the focus group students. Using the

codes that had emerged in the analysis of the focus groups, I developed the Likert scale statements by picking out sentences or phrases that had been said by participants. The statements were mostly taken word-for-word from the student statements but some of the students' phrases were amalgamated if there were similarities. For example, for the first survey question, 'What does the phrase 'challenging work' mean to you?', the survey statement 'Work that makes you think or stretches you' had been amalgamated from the focus group respondent phrase 'makes you think', which was said by three different students, and 'stretches you', which was said by another student. The words 'think' and 'stretches' were combined because they were both abstract concepts and more theoretical than a statement such as 'Work that gets you to apply your own knowledge to new situations', which has a tangible and visible result in the form of application of knowledge.

The first survey question, 'What does the phrase 'challenging work' mean to you?', and each of the Likert scale statements can be seen in **Figure 4.1**. The collated and annotated focus group responses for the corresponding focus group question, from which the Likert scale statements were created, can be seen in **Table 4.5.**

## Figure 4.1 Survey Question 1: What does the phrase 'challenging work' mean to you?



*1. What does the phrase 'challenging work' mean to you?

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Work that makes you think or stretches you | ○ | ○ | ○ | ○ | ○ |
| Work that gets you to apply your own knowledge to new situations | ○ | ○ | ○ | ○ | ○ |
| Tasks that are harder than normal classwork or homework | ○ | ○ | ○ | ○ | ○ |
| You have to push yourself a bit further so that you can complete it | ○ | ○ | ○ | ○ | ○ |
| Finding new ways of tackling problems | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Table 4.5 Focus Group responses to the question, 'Can you describe what you think the phrase 'challenging work' means to you?'

| Year 9 Focus Group 1 response | Year 9 Focus Group 2 response | Year 10 Focus Group 1 response | Year 10 Focus Group 2 response |
|---|---|---|---|
| G: Um, makes you think.<br><br>A: I think it means something that you've kind of vaguely covered but not in detail so you have to, yeah, like, apply your own knowledge to it and what you already know.<br><br>L: I think it's work that's harder than normal and really, yeah, makes you think a lot rather than just easy things that you've covered all in class. | T: Um, I think it means work which, um, you sort of have to push yourself a bit further so that you can complete it and, um, it's sort of new challenge and it helps you explore new ways of finding out answers to problems.<br><br>A: Um, I think it's something that stretches you, like, beyond what you're normally used to so if it's unusual to you or something you're not very used to doing it's finding new ways of tackling the problems.<br><br>L: And it also requires you to use previous skills you may have learned to develop new skills to find out the answer or what you're trying to find out. | T: It's work that, like, makes you think. That… in maths, it makes your brain hurt, and stuff.<br><br>**What do you mean by 'making your brain hurt'?**<br><br>T: It's just you really feel like you're actually doing something. You're actually using your brain. It's not like an easy question; you actually have to think about it.<br><br>**What do other people think?**<br><br>D: Yeah it's something that you can't get instantly, like you need to work at it in order to, like, succeed and so in some ways it's more satisfying once you've done it.<br><br>G: It's work that you might of not necessarily have learnt in class but you like expand on ideas and stuff like that. | P: Something, like, above and beyond what you're usually, like, doing in the lessons or for homework or something. So for example, if you were doing extra challenging work for homework then you were probably doing above what you would have done or something extension or something.<br><br>L: I think it's applying the principles you've learnt in class to some situation that you haven't learnt in class. So, let's say with Maths if they give you it with numbers and just say 'work out x, blah, blah, blah' but then they're just like 'I have 75 oranges, how many lemons do I have?' Yeah, it's like you have to think about it more.<br><br>S: It's requiring your brain to work harder and maybe using different techniques, which you're not usually applying.<br><br>I: More effort<br><br>S: Yeah. |

### 4.5.3 Piloting the survey

Dowling and Brown (2010) have identified a series of difficulties in devising questionnaires: the wording of the questions should enable all respondents to interpret them in exactly the same way for their responses to be comparable, for example, by being free from technical language and bias; if definitions are provided, meaning is imposed, which would prevent the researcher from collecting data on the extent to which respondents subjectively think about a concept. Finally, it can be difficult to use questionnaires to find out what people think or how they construct meaning, as it is not possible to ask respondents to explain their meaning.

To alleviate the impact of these problems, I asked a colleague to pilot the questionnaire with a Year 9 group. He asked them to comment on how they found the questions and whether any of the wording should be improved (Dowling and Brown 2010). The students made suggestions of words that they were unsure of the meaning of, or where they found statements long-winded. The wording of the phrases that had posed difficulties were changed for the final survey. For example, the word 'inclined' had originally appeared as part of an option for Question 9 'How do your teachers talk about learning or schoolwork with you?' in the Year 9 survey: 'My teachers are not inclined to say that work is hard'. The word 'inclined' was not familiar to all students so it was changed to 'My teachers do not usually say that work is hard'.

### 4.5.4 Sampling

As non-response can lead to unintentional bias because there is a connection between the reasons for non-response and the research topic (Dowling and Brown 2010), I tried to ensure that there was a good response rate. Four schools in addition to my own were invited to take part by email.

Out of the five schools that were invited to take part in my research, only three were able to be involved. In total, 192 students took the questionnaire, which is a good sample size for the nature of my study (Descombe 2003). Further details of the schools can be found in **Table 4.1**.

### 4.5.5 Procedures

The questionnaires were then drafted on SurveyMonkey so that it was attractive and easy to complete. One questionnaire was created for Year 9 and one for Years 10 and 11. Only the Year 9 survey was piloted in October 2013, as the majority of questions were the same. These were then sent to the schools so that they could check that they were happy with the questions; they were given the opportunity to take out some questions, if they wished. None chose to make any changes. The students completed the questionnaires in November and December 2013.

### 4.5.6 Ethics

Once the schools had confirmed their involvement, a letter was prepared that could be sent home to participants and their parents to explain the research and how the data would be used. The students were able to cease answering the questions at any point. Although absolute anonymity could not be guaranteed, names were never requested in the survey or from the schools and I was not in the schools when the surveys were completed. Approval was sought and granted from the ethics committee at the Institute of Education. The documentation can be found in **Appendix 2**.

### 4.5.7 Analysis of the Questionnaire

The data collected from the questionnaires were downloaded from SurveyMonkey into SPSS software. The data from each of the three schools and the three year groups were combined to form one data set.

The data for each of the survey questions were tabulated according to Key Stage, along with the number of students in each Key Stage who completed the survey, the Likert scale results, the mean and the standard deviation. This acted as a summary table for each question and can be found in Chapters 5-7. A list of the tables can be found at the start of the thesis.

Independent-samples t-tests were conducted to compare KS3 and KS4 student perceptions for each of the survey questions. Each of the results for the independent-samples t-tests were checked against Levene's test for equality of variance. This tests whether the variation of scores for the two groups, KS3 and KS4 is the same and therefore which statistic should be recorded (Pallant 2013). When statistically significant differences at the $p < .05$ level were found, these results were presented in the main body of the thesis. The full results for the independent-samples t-tests can be found in **Appendix 1**.

In the end, two of the questions were not analysed as, with hindsight, I did not believe they added to the study, as they did not have a specific reference to 'challenging work'. These questions were 'What do you think might help you to achieve more highly at school?' and 'What do you think might help you to enjoy your time more at school?'.

### 4.5.8 Validity and Reliability

For ease of administration, the students invited to complete the questionnaires included those identified as 'more able' as well as students who did not appear on a Whole School Register. It could therefore be argued that the views expressed at the focus group stage were unrepresentative of their peers and therefore cannot be used in comparison with the data from the questionnaire. However, as the focus groups had been used to identify how students perceived challenging work from which a questionnaire containing questions with Likert Scale responses was built, this could be considered a strength of the research as I am able to provide some insight as to whether the More Able Register students really differed from their peers in a significant way in terms of their perceptions of challenging work.

### 4.5.9 Limitations

As the Year 9 survey was piloted, many of the issues with the wording of the questions were picked up. Unfortunately, two of the statements in Question 7 ('If you would like your schoolwork to be harder, why is this?') on the KS4 survey had merged during the survey creation when the required space between the statements was accidentally deleted. This meant that both statements had to be disregarded at analysis stage: 'It's more enjoyable when you get it right'/ 'I am sometimes bored'. With hindsight, I should also have adapted the survey questions 'What do you think might help you to achieve more highly at school?' and 'What do you think might help you to enjoy your time more at school?' so that they included a specific reference to the phrase 'challenging work'.

Finally, the mixed methods approach of using focus groups and a questionnaire has enabled me to report on what individual students said as well as being able to show whether their responses reflected those of a larger body of students across three schools. However, as each of the three schools are of a similar 'type', being single-sex, selective, fee-paying, urban and located in a similar geographical location, I am still not able to claim that the student views apply across multiple settings. This study is a snapshot of student views in a particular context that offers a richer understanding to our collective knowledge of the perception of girls towards challenging work. Furthermore, although I am aware that institutional differences could have influenced the results of the survey, it was outside the scope of my thesis to explore these differences.

## Summary and outline of the structure of the thesis

This chapter has outlined the methodology that has shaped my approach to the study of perceptions of challenging work held by girls in the selective independent sector, as well as the data collection techniques I employed.

The next four chapters contain the findings, analysis and discussion from the focus groups and the surveys taken by students in the three schools. Chapter 5 discusses the girls' perceptions of challenging work; Chapter 6 explores their perceptions of the level of challenge within their schoolwork; and Chapter 7 outlines their perceptions of factors that enable them to engage with challenging work. Chapter 8 draws together the different themes in the findings and analysis chapters to discuss their significance. Recommendations for further research will also be included.

# Chapter 5: Student descriptions of Challenging Work

This chapter explores aspects of challenging work according to the perceptions of girls in the selective independent sector. I will consider what girls in the transition between KS3 and KS4 perceive as challenging work, which is linked to the first of my three research questions: What do girls in the transition between KS3 and KS4 in the selective independent sector perceive as challenging work and is this linked to theories of deep learning?

The data are presented according to themes about challenging work and deep learning extracted from the responses of Year 9 and Year 10 students during the focus groups:

- challenging work involves learning actively;
- challenging work involves applying knowledge outside of the classroom boundary;
- challenging work is beyond the ordinary;
- tasks are challenging when students are responsible for organising the learning process;
- tasks are challenging when you have to rely on others;
- work is challenging when students feel overloaded;
- challenging work takes perseverance in order to succeed.

Data from the surveys that were carried out with students in Years 9, 10 and 11 will then be presented. This data will not merely be used to triangulate the findings from the focus groups but will also be used to build a richer picture of how the students defined challenging work. The data from the surveys are arranged by their responses to two survey questions:

- What does the phrase ‘challenging work’ mean to you?
- What does ‘challenging work’ look like in the classroom?

The section will end with a discussion of the relationship between the focus groups and the questionnaires.

## 5.1 Focus Groups

### 5.1.1 Challenging work involves learning actively

Many of the comments by the students in the focus group indicated that challenging work involved the students having to participate actively in their learning. Some students commented on how they felt that challenging work meant that they were actually doing something with their brain:

*"It's requiring your brain to work harder…' (Year 10, Focus Group 2)*

*"It's just you really feel like you're actually doing something. You're actually using your brain. It's not like an easy question; you actually have to think about it." (Year 10, Focus Group 1)*

One student felt that she had to 'push' herself in order to complete tasks:

*"I think it means work which, um, you sort of have to push yourself a bit further so that you can complete it." (Year 9, Focus Group 2)*

Another student's reference to how challenging tasks caused the student to 'explore' new methods of finding out answers indicates active rather than passive learning:

*"… it's sort of new challenge and it helps you explore new ways of finding out answers to problems." (Year 9, Focus Group 2)*

### 5.1.2 Challenging work involves applying knowledge outside the classroom boundary

Many of the students in the focus groups also indicated that challenging work involved applying their knowledge, either to new situations or in the development of skills, to achieve something new. This involved going into more detail than had been covered in the classroom and could include extension questions:

*"I think it means something that you've kind of vaguely covered but not in detail so you have to, yeah, like, apply your own knowledge to it and what you already know." (Year 9, Focus Group 1)*

*"It's work that you might of not necessarily have learnt in class but you like expand on ideas and stuff like that." (Year 10, Focus Group 1)*

*"I think challenging work is more like the extension questions, you know, you've got the questions in class and you've got these extra questions which are more knowledge than you already know out onto what you've been taught in class so they can challenge you further." (Year 9, Focus Group 1)*

It also included applying the principles that had been learnt in class to a new situation:

*"...when sometimes in class it's like occasionally when we have group work when we have to find something out or kinda based on something we've been doing in class kinda loosely and then kinda applying that contextual knowledge, usually." (Year 9, Focus Group 1)*

*"I think it's applying the principles you've learnt in class to some situation that you haven't learnt in class." (Year 10, Focus Group 2)*

*"... it also requires you to use previous skills you may have learned to develop new skills to find out the answer or what you're trying to find out." (Year 9, Focus Group 2)*

### 5.1.3 Challenging work is beyond the ordinary

There was agreement between the students in the focus groups that challenging work was work that was perceived as harder than the tasks students regularly received:

*"I think it's work that's harder than normal and really, yeah, makes you think a lot rather than just easy things that you've covered all in class." (Year 9, Focus Group 1)*

*"Something, like, above and beyond what you're usually, like, doing in the lessons or for homework or something." (Year 10, Focus Group 2)*

*"Well, usually I think challenging work is, like, essays or something cos you don't get them on a daily basis so it's quite, like, not a shock, it's, uh, I don't know, it's like different from what you normally do so that's kind of challenging for me." (Year 9, Focus Group 1)*

Some students commented that it was work that stretched them beyond tasks they normally did, causing them to find new ways of tackling problems:

*"... it's sort of new challenge and it helps you explore new ways of finding out answers to problems." (Year 9, Focus Group 2)*

*"I think it's something that stretches you, like, beyond what you're normally used to so if it's unusual to you or something you're not very used to doing it's finding new ways of tackling the problems." (Year 9, Focus Group 2)*

Another student referred to how it encouraged them to use techniques that they were not used to using:

*"It's ... maybe using different techniques, which you're not usually applying." (Year 10, Focus Group 2)*

The focus group students also indicated that challenging work could also be defined as work that is received infrequently:

*"I wouldn't say on, like, every lesson. I would say every other homework or, like, maybe every couple of weeks. Like it's not a daily thing; it's just, like, every once in a while you get a hard homework so the teacher can actually see what you've learnt." (Year 9, Focus Group 1)*

*"Well, usually I think challenging work is, like, essays or something cos you don't get them on a daily basis so it's quite, like, not a shock, it's, uh, I don't know, it's like*

*different from what you normally do so that's kind of challenging for me." (Year 9, Focus Group 1)*

The frequency with which they received challenging tasks varied according to subject:

*"I think in some lessons we get it in more than others but to me I think maybe, like, weekly. Like in one subject, we'll have at least once a week we'll have something challenging." (Year 9, Focus Group 1)*

### 5.1.4 Tasks are challenging when students are responsible for organising the learning process

The focus group students appeared to link the perception of challenging work with the extent to which they were required to work independently on the management and completion of tasks.

Some students found the management of a lot of information challenging when they had to decide what was accurate and relevant:

*"Yeah, for me, I find researching homeworks quite challenging because now, with all the internet and everything, it's really easy to slip up and get some wrong information and so I find in research you have to think for yourself what you have to find and you have to search really carefully. That's challenging." (Year 9, Focus Group 2)*

They also found it challenging when they had to decide how much information to include and how it should be presented:

*"Long essays! ... Because it's quite – you need to, like, be, em, kind of concise but put in a lot of information so it's kind of a challenge not to do too much but having it simple so it's not boring to read or it's not like too much, too long." (Year 9, Focus Group 2)*

The management of their own time by the students could make tasks more challenging. This included the temptation to procrastinate and of being unsure

of how long to spend on a task when they had been given a long period of time in which to complete it:

*"Subjects which it's easy to procrastinate sometimes for or when you've been given a big essay but lots of time to do it in, you often leave it to the day before (some agreement) and it's too late and you have to spend a lot of time on it then." (Year 10, Focus Group 2)*

*"I find it harder to complete if you've got longer to do it cos then you don't, you don't know how long – how much time you should spend on it because you've got more time to spend on it but you might have spent already over your allocated homework time." (Year 9, Focus Group 2)*

The fact that both of these students mentioned that they spent 'a lot of time' and went 'over…allocated homework time' on such tasks suggests that challenging work may include tasks that are longer in length than usual homework tasks.

The students in the focus groups also said that work was more challenging when their teachers did not give them a clear set of notes or instructions to help them to complete the tasks:

*"- When teachers give you a sheet and they give you loads of questions on it but they don't actually talk through the stuff that you're answering questions on so, for example in Biology, sometimes they give us big booklets and they're like 'Ok, answer these questions' but you haven't really learnt anything-*

*- And the notes aren't on the questions.*

*- Yeah, and the notes aren't like – and you kind of need someone to explain it to you before you can understand it." (Year 10, Focus Group 2)*

*"I think also, when we're not given - when the teachers purposely don't give us very defined set of instructions so when it's kind of loosely – kind of, say – I think that's most challenging when they kind of give you a homework based on something you've been doing in class but not really, you kind of have to develop it yourself." (Year 9, Focus Group 1)*

There were subtle differences in the comments made by the two year groups. Year 9 students tended to emphasise the issues they had of managing their work, both due to the amount of work they received and the open-ended nature of the tasks they were given to complete by their teachers. Year 10 emphasised time constraints and not always seeing the relevance of tasks to the notes that they had been given in class.

### 5.1.5 Tasks are challenging when you have to rely on others

The students in the focus groups indicated how working with other people could both define whether a task was challenging or make an already challenging task even more so. Students commented that it was difficult to organise the work of the group, particularly large groups, to ensure that the task was completed as people had different pressures on their time. This also indicates that such tasks were often set outside of the classroom:

*"I think, generally, if it's research work or project work that relies on other people because everyone's going to have different sort of commitments that they have to do and different times that they're going to be able to do the work, so when stuff's in big groups it gets quite tricky." (Year 10, Focus Group 2)*

Group work also made tasks more challenging as some students did not put in the same amount of work as other students:

*"I think it's kind of the most challenges when you're in a group and you've got a really long piece of homework and you've kind of all got to work together and sometimes people aren't there or, like, they don't, like, do enough and you kind of have to depend on other people as well rather than just your own work." (Year 9, Focus Group 1)*

### 5.1.6 Work is challenging when students feel overloaded

The volume of work students received was referred to in conjunction with challenging work. When students felt that they had too much homework, they found their work more challenging to complete:

*"Em, I find work quite difficult to complete when I have a lot of it at the same time (agreement), because when you just have a couple a day, it's quite manageable and you're calm and you can just quickly get them done but if you've got loads and they're all – and obviously it's hard because the teachers can't really communicate about the work you're given! So, em, I guess you just have to learn how to manage with that." (Year 9, Focus Group 2)*

If the task itself was long it was seen to be challenging, as it detracted from the necessary motivation and energy the students felt they needed in order to complete the work:

*"Em, the type of work probably would be, like, something quite long because you don't really have that much motivation to do it because it kind of drains you so like a long essay or question paper with, like, two pages or something." (Year 9, Focus Group 1)*

### 5.1.7 Challenging work takes perseverance in order to succeed

A facet of challenging work was thought to be the demands for perseverance. This was illustrated by a student who reported that challenging tasks require work and were therefore more satisfying:

'*...it's something that you can't get instantly, like you need to work at it in order to, like, succeed and so in some ways it's more satisfying once you've done it." (Year 10, Focus Group 1)*

## 5.2 Results from the survey

Questionnaires were developed from the ideas that emerged from the focus groups and given to students in Years 9, 10 and 11 in three selective independent girls' schools. The purpose of the questionnaires was to explore the

extent to which the ideas emerging from the focus groups were shared amongst a wider group of pupils within the independent girls' school sector. The results from the survey therefore both elucidated and built upon the picture the focus group responses had created.

### 5.2.1 Approach to analysis of the survey

Two of the survey questions will be analysed in this section:

- What does the phrase 'challenging work' mean to you?
- What does 'challenging work' look like in the classroom?

The data for each of these questions will be presented in turn. First of all, a summary table showing the number of students who responded to the question, their Likert scale responses, the mean and standard deviation will be presented. Then the results from the independent-samples t-tests, which were conducted to compare differences between Key Stages. A more detailed description of the analysis of the survey data can be found in the Methodology chapter.

### 5.2.2 Student definitions of challenging work

The survey data showed that there was strong agreement and little variability in responses with all of the statements that defined challenging work (**Table 5.1**). Overall, the greatest agreement was found in relation to the idea that challenging work was something that stretched or made students think ($\underline{M}$ = 4.27). This was closely followed by strong agreement with the view that challenging work required students to push themselves further in order to achieve ($\underline{M}$ = 4.18). Strong agreement was also found in relation to tasks that were harder than normal classwork or homework ($\underline{M}$ = 3.89); the application of knowledge to new situations ($\underline{M}$ = 3.56); and finding new ways of tackling problems ($\underline{M}$ = 3.49).

Independent-samples t-tests were conducted to compare differences between Key Stages with regard to student definitions of challenging work. There were

no statistically significant differences in the perceptions of KS3 and KS4 students at either level.

## Table 5.1: Differences between Year Groups in Student definitions of challenging work

| Q. What does the phrase 'challenging work' mean to you? | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. (100%) | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean* | Std. Deviation |
| Work that makes you think or stretches you | KS3 | 63 | 0 | 2 | 3 | 33 | 25 | 4.29 | .70 |
| | KS4 | 129 | 0 | 1 | 11 | 71 | 46 | 4.26 | .64 |
| TOTAL | | 192 | 0 | 3 (2%) | 14 (7%) | 104 (54%) | 71 (37%) | 4.27 | .66 |
| Work that gets you to apply your own knowledge to new situations | KS3 | 63 | 0 | 6 | 23 | 31 | 3 | 3.49 | .74 |
| | KS4 | 129 | 0 | 13 | 42 | 58 | 16 | 3.60 | .83 |
| TOTAL | | 192 | 0 | 19 (10%) | 65 (34%) | 89 (46%) | 19 (10%) | 3.56 | .80 |
| Tasks that are harder than normal classwork or homework | KS3 | 63 | 0 | 5 | 14 | 29 | 15 | 3.86 | .88 |
| | KS4 | 129 | 0 | 9 | 18 | 75 | 26 | 3.90 | .83 |
| TOTAL | | 192 | 1 (1%) | 14 (7%) | 32 (17%) | 104 (54%) | 41 (21%) | 3.89 | .84 |
| You have to push yourself a bit further so that you can complete it | KS3 | 63 | 0 | 1 | 6 | 38 | 18 | 4.16 | .65 |
| | KS4 | 129 | 0 | 0 | 16 | 72 | 41 | 4.19 | .64 |
| TOTAL | | 192 | 0 | 1 (1%) | 22 (11%) | 110 (57%) | 59 (31%) | 4.18 | .64 |
| Finding new ways of tackling problems | KS3 | 63 | 0 | 8 | 21 | 27 | 7 | 3.52 | .86 |
| | KS4 | 129 | 2 | 17 | 42 | 53 | 15 | 3.48 | .92 |
| TOTAL | | 192 | 2 (1%) | 25 (13%) | 63 (33%) | 80 (42%) | 22 (11%) | 3.49 | .90 |

*Mean: 1 = strongly disagree; 5 = strongly agree

Some survey respondents chose to offer another definition of challenging work by writing a response in the option 'Other' box (**Table 5.2**). There was some similarity with the Likert statements already in the question. For example, 'Harder work than usual' was similar to the phrase 'Tasks that are harder than normal classwork or homework' in the survey.

However, some of the 'Other' statements given by the survey respondents introduced additional, interesting responses to this question. The statements, 'Work that you do that is not at the expected level for you' and 'Work that is at a higher level than you are at' shows similarity with Vygotsky's (1978) idea of a 'zone of proximal development' as they refer to the level of work the student is given in comparison to the teacher's perception of the student to complete the task or the student's perception of their own ability to complete the task. The statement, 'Work that is hard but is achievable, as we have been set it for a reason', indicates the perceived role of the teacher in setting the level of the task so that it is challenging.

Two of the statements indicated more strongly that challenging work required persistence than had been encapsulated in the survey statement 'You have to push yourself a bit further so that you can complete it'. The statements, 'Work where the answer doesn't come straight away' and 'Trying something that you would normally find difficult and doing it to the best of your ability', both imply the need to struggle and persevere with a challenging task.

Finally, the definition of challenging work as 'Work that makes you feel lost' conveys a sense of hopelessness that challenging tasks might induce in a student.

## Table 5.2 'Other' definitions of challenging work from the survey

| Key Stage | Definition of challenging work |
|---|---|
| KS3 | Work that is hard but is achievable, as we have been set it for a reason. |
| KS3 | Work where the answer doesn't come straight away. |
| KS3 | Work that you do that is not at the expected level for you. |
| KS3 | Work that is at a higher level than you are at. |
| KS3 | Harder work than usual |
| KS4 | Trying something that you would normally find difficult and doing it to the best of your ability |
| KS4 | Work that makes you feel lost |

### 5.2.3 Student descriptions of challenging work

Lower agreement was found in relation to the statements relating to student descriptions of challenging work in the classroom but agreement with these statements was still fairly high (**Table 5.3**). The greatest agreement can be seen in relation to extension questions being a type of challenging work (M = 3.70), closely followed by tasks that require application of own knowledge (M = 3.64); work completed under timed conditions (M = 3.55); and essays (M = 3.25). Research homework (M = 2.74) and group research tasks (M = 2.72) saw the lowest agreement.

Independent-samples t-tests were conducted to compare student descriptions of challenging work by Key Stage across all of the data. Again, there were no statistically significant differences in the perceptions of KS3 and KS4 students at either level.

## Table 5.3: Student descriptions of challenging work in the classroom by Key Stage

| | Key Stage | No. | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean* | Std. Dev. |
|---|---|---|---|---|---|---|---|---|---|
| Essays | KS3 | 63 | 1 | 11 | 26 | 18 | 7 | 3.30 | .94 |
| | KS4 | 129 | 5 | 24 | 51 | 35 | 14 | 3.22 | 1.00 |
| TOTAL | | 192 | 6 (3%) | 35 (18%) | 77 (40%) | 53 (27%) | 21 (11%) | 3.25 | .98 |
| Group research tasks that rely on other people's contributions | KS3 | 63 | 5 | 22 | 22 | 13 | 1 | 2.73 | .94 |
| | KS4 | 129 | 7 | 51 | 45 | 23 | 3 | 2.72 | .90 |
| TOTAL | | 192 | 12 (6%) | 73 (38%) | 67 (35%) | 36 (19%) | 4 (2%) | 2.72 | .91 |
| Tasks that require you to apply your own knowledge | KS3 | 63 | 0 | 4 | 16 | 37 | 6 | 3.71 | .73 |
| | KS4 | 129 | 1 | 13 | 38 | 62 | 15 | 3.60 | .85 |
| TOTAL | | 192 | 1 (1%) | 17 (9%) | 54 (28%) | 99 (52%) | 21 (13%) | 3.64 | .81 |
| Work completed under timed conditions | KS3 | 63 | 1 | 7 | 20 | 28 | 7 | 3.52 | .90 |
| | KS4 | 129 | 2 | 17 | 32 | 62 | 16 | 3.57 | .93 |
| TOTAL | | 192 | 3 (2%) | 24 (13%) | 52 (27%) | 90 (47%) | 23 (12%) | 3.55 | .91 |
| Research homework | KS3 | 63 | 3 | 26 | 25 | 7 | 2 | 2.67 | .86 |
| | KS4 | 129 | 7 | 44 | 51 | 25 | 2 | 2.78 | .88 |
| TOTAL | | 192 | 10 (5%) | 70 (36%) | 76 (39%) | 32 (17%) | 4 (2%) | 2.74 | .87 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Extension questions | KS3 | 63 | 1 | 5 | 15 | 31 | 11 | 3.73 | .90 |
| | KS4 | 129 | 0 | 8 | 27 | 63 | 17 | 3.69 | .78 |
| TOTAL | | 192 | 1 (1%) | 13 (7%) | 56 (29%) | 94 (49%) | 28 (15%) | 3.70 | .82 |

*Mean: 1 = strongly disagree; 5 = strongly agree

Three students offered 'Other' descriptions of challenging work (**Table 5.4**). The statements, 'Tasks which make you think more than you usually would and applying your thoughts in different ways' and 'Work that requires thought, not Google', were quite similar to the descriptions of challenging work in Section 4.8.1. However, the description of challenging work as involving a student 'Doing extra tasks that you otherwise wouldn't need to do' conveys the sense that challenging work in the classroom involves the completion of tasks that go beyond the requirements of a lesson, although the sense of whether these extra tasks are deemed useful by the student is not conveyed.

### Table 5.4 'Other' descriptions of challenging work from the survey

| Key Stage | Definition of challenging work |
|---|---|
| KS3 | Tasks which make you think more than you usually would and applying your thoughts in different ways |
| KS4 | Doing extra tasks that you otherwise wouldn't need to do |
| KS4 | Work that requires thought, not Google |

## 5.3 The relationship between the focus groups and the survey

The survey data showed that there was strong agreement and little variability in responses with all of the statements that defined challenging work. Some of the 'Other' statements given by the survey respondents introduced additional,

interesting responses to this question but these were few in number, indicating that the majority of the survey students did not wish to provide alternative definitions for the phrase 'challenging work.

Although lower agreement was found in relation to the statements relating to student descriptions of challenging work in the classroom, agreement with these statements was still fairly high.

In conclusion, the views expressed by the 'more able' students in the focus group found good agreement when tested with a wider group of students in the survey.

## Summary

In this chapter I have discussed aspects of challenging work amongst girls in the selective independent sector as presented by Year 9 and Year 10 students in focus groups and triangulated by questionnaire data from students in Years 9, 10 and 11 in three selective independent girls' schools.

The data from the focus groups showed that the girls offered rich definitions of challenging work that had links to the concept of deep learning. They perceived challenging work as being tasks that involve the student learning actively; applying knowledge outside of the classroom boundary; and tasks that are different from work regularly received. In addition, they perceived work as more challenging when the students themselves were responsible for the learning process; when they had to work with other students; or when they felt overloaded. Finally, comments from the students in the focus groups indicated that challenging work took perseverance in order to succeed and for that reason was satisfying. The survey revealed strong agreement with these definitions of challenging work.

The types of challenging work students perceived they completed in the classroom included essays; group research tasks that rely on other people's contributions; tasks that require students to apply their own knowledge; tasks com-

pleted under timed conditions; research homework; and extension questions. Although the survey data showed that there was lower agreement in relation to these descriptions of challenging work in the classroom, agreement with these statements was still fairly high.

There were no statistically significant differences in the perceptions of KS3 compared to KS4 with regards to either the definitions of challenging work or the descriptions of challenging work in the classroom.

The next chapter explores student perceptions of the level of ‘challenge’ in their schoolwork.

# Chapter 6: Student perceptions of the level of challenge in their schoolwork

In chapter 5, the findings reported indicated that the girls offered rich definitions of challenging work. This chapter will explore student perceptions of the level of challenge in their schoolwork, which is linked to my second research question: How do girls in the transition between KS3 and KS4 in the selective independent sector feel about the level of challenge in their current work?

First of all, data extracted from the responses of Year 9 and Year 10 students during the focus groups are presented according to themes about student perceptions of the level of challenge in their schoolwork:

- the impact of the particular topic and time of year;
- the impact of the perception of one's ability to achieve;
- student readiness to complete more challenging work.

Data from the surveys that were carried out with students in Years 9, 10 and 11 will then be interrogated to build upon the picture created by the focus group findings, considering key stage differences and differences between student responses in the three schools. These will be structured according to the survey questions that are linked to student perception of challenge. Firstly, student responses relating to their perception of work difficulty by subject and whether they have perceived a change in work difficulty will be analysed to ascertain the level of challenge the students perceived in each of their subject. Then a series of questions will be analysed to consider the extent to which student perception of their ability to achieve and whether they are actually completing extension tasks.

These quantitative findings relate to several focus group themes:

- the impact of the perception of one's ability to achieve;
- the readiness of students to complete more challenging work;
- the extent to which students have preference for harder or easier work and the reasons the students indicated for their choice;
- student enjoyment of their current work;

- the frequency with which extension tasks are completed by students;
- student perceptions of intelligence;
- how students chose their GCSE subjects and how they feel towards their GCSE examinations.

Finally, the relationship between the focus groups and the survey will be discussed.

## 6.1 Focus Groups

### 6.1.1 Student perception of the difficulty of schoolwork depends on the topic and the time of year

During the focus groups, the students were asked to consider how challenging they perceived their current work to be, relating their answers to a scale from one to ten where ten would be the most challenging. There was a strong sense that the perception of how challenging work was differed according to the time of year. Work tended to be perceived as more challenging towards the beginning of the school year or when students were starting new topics, indicating that the challenge lay in the fact that they were studying new information or developing new skills.

*"Um, at the moment, like right now, it's not as challenging as it has been during the year because we're kind of towards the end of the year and we've, like, almost finished the curriculum and everything. So, right now it would be, like, 5 maybe, but earlier on in the year especially at the start when you're starting something new it's more like 8 or 9 and it changes depending on, like, what term and what subject you're doing." (Year 9, Focus Group 1)*

*"I think around – not around the summer exams because the summer exams is just your knowledge kind of - but more like when you're starting new topics I'd say about an 8, 7 to 8 as challenge." (Year 9, Focus Group 1)*

*"I think I'd give when you're starting a topic an 8 but then as you go through it, it kind of decreases." (Year 9, Focus Group 1)*

One student did, however, find the examination period the point when she found work to be most challenging. In this instance, the perceptions of challenge seemed to be linked to the volume of information that the students were expected to synthesise.

*"I would say, well, during exams, it's more like 7 or 8 or maybe even a bit higher because they ask you to know a lot of information at one time and just be able to sort things out but at the moment." (Year 9, Focus Group 2)*

Perceptions of challenge were also discipline-specific. One student indicated that the level of perceived challenge within work varied according to topic:

*"I also think it depends on what kind of topics you're doing. Because sometimes there can be easier topics and they can only give you straightforward questions but then with other topics they can like – with other topics they can sort of make it more wordy and I think things like English, I think it does all stay at the same level because you're kind of doing the same sort of thing." (Year 10, Focus Group 2)*

### 6.1.2 Student perception of the difficulty of schoolwork is related to perceptions of one's ability to achieve

There was also an indication that a student's perception of her ability to engage with challenging work was linked to her understanding of her ability to do the work well. There was a sense that the perception of difficulty in schoolwork was linked to a perception of one's ability to achieve in a particular subject, for example:

*"Well, it depends how good you are at that subject. I know that I'm not brilliant at Biology so I find a lot of Biology homeworks more challenging than subjects I'm better at." (Year 10, Focus Group 2)*

The first Year 10 Focus Group mainly suggested that the level of work they were given in Year 10 was at a similar level to what they had received in Year 9. The other Year 10 Focus Group believed that the work was of a harder level. The students were drawn from across the year group, and therefore were in at least some of the same classes as each other and thus received the same

type of work at the same level of difficulty. Thus, the differing perceptions may have been more owing to their understanding of their ability to do well at GCSE, and what 'doing well' meant to them – or even of their experience of difficulty within the work set - than the actual nature of the work itself. This may be linked to their perceptions of what the grades or marks they achieved meant:

*"Also, you take for granted high marks [in Year 9]. I don't know, cos I remember last year it was a lot higher and now the grades change so you might have thought, like, in the seventies it was fine last year, but now it's like A/A* in some subjects so it's a different perspective on work." (Year 10, Focus Group 2)*

*"You kind of have to adjust your mindset because the work's harder and obviously you're going to be tested on the work this year next year so you kind of have to be in the mindset that 'Oh, well the work's going to be harder so the grades are going to be lower' but it is a bit, you know, when you look at the grades." (Year 10, Focus Group 2)*

Many of the focus group students agreed that understanding was more important than attainment in the sense that understanding was what led to attainment:

*"I think they're really linked, 'cos you're not going to be able to get a grade if you don't understand the work in the first place." (Year 9, Focus Group 2)*

*"I feel like attainment, you can't really gain that unless you fully understand something. And also, if you fully understand something you're probably more likely to enjoy it and more likely to become engaged and involved with it and attainment comes afterwards." (Year 10, Focus Group 2)*

However, several Focus Group students indicated that attainment was ultimately of most importance:

*"I'd like to say that understanding is more important but I kind of feel that attainment is more important, well, to me maybe, but, em, because, you know you can, like, you feel a lot better when you do well and if you do badly you can't - you don't want to say 'oh, but I understand*

*it', you don't quite feel as good as if you get a good grade and then it just makes you feel better." (Year 9, Focus Group 1)*

*"... your understanding doesn't reflect on anything if you don't do well in the end result." (Year 9, Focus Group 1)*

*"... ultimately attainment is kind of vital when you're trying to get GCSEs and stuff." (Year 10, Focus Group 2)*

### 6.1.3 Students are open to the option of completing more challenging work

Many students thought that the level of work they received was appropriate; this indicated that they believed challenges could be met if students put in commensurate effort:

*"I'd say, what we have it now, or maybe a bit harder because what I think we have now is not easy, but it's manageable if you're listening, if you're trying … And if you want to go a bit further then maybe a bit harder but I think our school right now, the work is kind of appropriate to our standard." (Year 9, Focus Group 2)*

*"I think it's fine the way it is.*

***Why?***

*Cos I just think that it's at a level that makes sense and that it's been worked out pretty well so it's challenging to the extent that you're not sat there wondering what you're doing… but you're still thinking." (Year 10, Focus Group 1)*

A number of the students, however, commented that they felt they could be given more challenging work. One comment indicated that the students saw a link between challenging work and learning actively, where she would be expected to apply her contextual knowledge:

*"I think sometimes when we're learning things in lessons and it's more just answering questions but maybe, as in challenging work, more like context – having stuff*

*where we put our contextual knowledge into use with other stuff it's quite, maybe to have a bit more of that." (Year 9, Focus Group 1)*

Other students implied that they thought it would be better if they were given harder work as they found it more enjoyable to complete:

*"I think it would be better if it was a bit harder because then it's more enjoyable when you get it right whereas when it's easy you just expect to get it right anyway!" (Year 9, Focus Group 1)*

*"I think there should be more extension stuff… Quite often extension stuff is if you've done already the classwork, whereas it should be if you're bored with the class-work." (Year 10, Focus Group 1)*

However, again there was a sense that student openness to engage with more challenging work depended on the subject:

*"It varies with subjects… Cos if you have strengths in – say, for example, if you're a sciency person and you find sciences easier then maybe you would prefer more challenging work whereas if you were struggling in something like English, for example, and you weren't as competent then you would probably prefer to have easier work so you could develop more and get better before pushing yourself." (Year 10, Focus Group 2)*

Furthermore, not all students wanted to have challenging work all the time, as it could be uncomfortable:

*"I think it's quite good, though, to have it steady at, you know, 5 or 6 (agreement) because you're comfortably understanding. There's sometimes when it's a bit harder when you're pushing yourself but then, when it comes to exams, because you've had that really solid thing, um, you'll be able to push yourself." (Year 9, Focus Group 2)*

This student's comment also implied recognition that some challenging work was inevitable. Another Year 9 student initially said that she thought that easier schoolwork would be good as it would lead to less stress, but then went on to say that harder schoolwork would have its benefits:

*"Em, well obviously it would be nice if it was easier but I feel that-*

***Why would that be nice?***

*Just, cos like it's kind of a weight off your shoulders, it's not as much stress, maybe; but also if it was harder it would be more… if it was harder then you would be more like learn more from what you're doing wrong." (Year 9, Focus Group 1)*

## 6.2 Results from the survey

The participants in the focus groups were from the Whole School More Able register and therefore may have perceived work to be less challenging than many of their peers. The questionnaire that was developed from the ideas that emerged from the focus groups and given to students in Years 9, 10 and 11 in three independent girls' schools was therefore key in exploring the extent to which the ideas expressed in the focus groups were held more widely. The results from the survey therefore both elucidated and built upon the picture the focus group responses had created.

### 6.2.1 Approach to analysis of the survey

Several of the survey questions will be analysed in this section. These questions are related to how challenging the girls perceive their schoolwork to be and are related to the second research question: How do girls in the transition between KS3 and KS4 in the selective independent sector feel about the level of challenge in their current work?

- On a scale of 1 to 5 with 5 being the highest, how difficult is the work you are currently given to complete in the following subjects?
- Do you notice a difference in the standard of work you complete this year compared to last year?
- Would you like your schoolwork to be easier or harder?
- If you would like your schoolwork to be easier, why is this?
- If you would like your schoolwork to be harder, why is this?

- On a scale of 1 to 5 with 5 being the highest, how much do you enjoy the schoolwork you are currently given to complete?
- How often do you complete extension tasks?
- What type of extension tasks do you prefer to complete?
- What's more important to you, understanding or attainment?
- How do you feel about starting your GCSE subjects next year? (KS3 only)
- How did you make your GCSE choices? (KS4 only)

The data for each of these questions will be presented in turn. First of all, a summary table showing the number of students who responded to the question, their Likert scale responses, the mean and standard deviation will be presented. Then the results from the independent-samples t-tests, which were conducted to compare differences between Key Stages will be conveyed. A more detailed description of the analysis of the survey data can be found in the Methodology chapter.

### 6.2.2 Student perceptions of difficulty of work by subject

The students were asked to indicate on a five-point Likert scale the difficulty they perceived in each of the subjects they studied. This question was linked to the second research question: How do girls in the transition between KS3 and KS4 in the selective independent sector feel about the level of challenge in their current work?

The results for this question showed that, taken as a whole, students felt that they were not overly challenged by their current work (**Table 6.1**). Whilst there was some variety in student perceptions of work difficulty between subjects, the range was relatively small: the subjects perceived to be most difficult were the Sciences ($\underline{M}$ = 3.48), whilst the subject perceived as least difficult was Religious Education ($\underline{M}$ = 2.40).

## Table 6.1 Student perception of subject work difficulty

| Q. On a scale of 1 to 5 with 5 being the highest, how difficult is the work you are currently given to complete in the following subjects? | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Key Stage** | **Number of students** | **No re-sponse** | **N/A** | **Very easy** | **Easy** | **Fine** | **Hard** | **Very hard** | **Mean*** | **Std. Dev.** |
| Art | KS3 | 63 | 2 | 2 | 15 | 28 | 15 | 1 | 0 | 2.03 | .77 |
| | KS4 | 129 | 0 | 74 | 3 | 18 | 18 | 14 | 2 | 2.89 | .98 |
| TOTAL | | 192 | 2 (1%) | 76 (40%) | 18 (9%) | 46 (24%) | 33 (17%) | 15 (8%) | 2 (1%) | 2.45 | .97 |
| Classical Civilisation | KS3 | 63 | 2 | 51 | 2 | 3 | 4 | 1 | 0 | 2.40 | .97 |
| | KS4 | 129 | 0 | 120 | 1 | 2 | 2 | 4 | 0 | 3.00 | 3.00 |
| TO-TAL | | 192 | 2 (1%) | 171 (89%) | 3 (2%) | 5 (3%) | 6 (3%) | 5 (3%) | 0 | 2.68 | 1.06 |
| Drama | KS3 | 63 | 2 | 3 | 12 | 26 | 14 | 2 | 4 | 2.31 | 1.06 |
| | KS4 | 129 | 0 | 97 | 3 | 9 | 14 | 2 | 4 | 2.84 | 1.11 |
| TOTAL | | 192 | 2 (1%) | 100 (52%) | 15 (8%) | 35 (18%) | 28 (15%) | 4 (2%) | 8 (4%) | 2.50 | 1.10 |

| | Key Stage | No. | No re-sponse | N/A | Very easy | Easy | Fine | Hard | Very hard | Mean* | Std. Devia-tion |
|---|---|---|---|---|---|---|---|---|---|---|---|
| English | | | | | | | | | | | |
| | KS4 | 129 | 0 | 0 | 8 | 20 | 52 | 40 | 23 | 3.17 | .99 |
| TOTAL | | 192 | 2 (1%) | 0 | 12 (6%) | 33 (17%) | 76 (40%) | 56 (29%) | 13 (7%) | 3.13 | .99 |
| Geogra-phy | KS3 | 63 | 2 | 0 | 3 | 15 | 27 | 16 | 0 | 2.92 | .84 |
| | KS4 | 129 | 0 | 62 | 6 | 15 | 23 | 20 | 3 | 2.97 | .88 |
| TOTAL | | 192 | 2 (1%) | 62 (32%) | 9 (5%) | 30 (16%) | 50 (26%) | 36 (19%) | 3 (2%) | 2.95 | .95 |
| History | KS3 | 63 | 2 | 0 | 3 | 18 | 21 | 16 | 3 | 2.97 | .98 |
| | KS4 | 129 | 0 | 41 | 2 | 16 | 29 | 32 | 9 | 3.34 | .97 |
| TOTAL | | 192 | 2 (1%) | 41 (21%) | 5 (3%) | 34 (18%) | 50 (26%) | 48 (25%) | 12 (6%) | 3.19 | .99 |
| ICT | KS3 | 63 | 2 | 0 | 10 | 14 | 24 | 8 | 5 | 2.74 | 1.14 |
| | KS4 | 129 | 0 | 109 | 3 | 8 | 5 | 3 | 0 | 2.55 | 1.10 |
| TOTAL | | 192 | 2 (1%) | 109 (57%) | 13 (7%) | 22 (11%) | 29 (15%) | 11 (6%) | 6 (3%) | 2.69 | 1.26 |
| Lan-guage/s | KS3 | 63 | 2 | 0 | 5 | 7 | 16 | 16 | 17 | 3.54 | 1.25 |
| | KS4 | 129 | 0 | 1 | 7 | 35 | 40 | 29 | 17 | 3.11 | 1.12 |
| TOTAL | | 192 | 2 (1%) | 1 (1%) | 3 (2%) | 20 (10%) | 23 (12%) | 13 (7%) | 5 (3%) | 3.25 | 1.17 |

| | Key Stage | No. | No re-sponse | N/A | Very easy | Easy | Fine | Hard | Very hard | Mean* | Std. Devia-tion |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Latin | KS3 | 63 | 2 | 16 | 8 | 10 | 15 | 5 | 7 | 2.84 | 1.30 |
| | KS4 | 129 | 0 | 114 | 4 | 15 | 22 | 27 | 5 | 3.40 | 1.06 |
| TOTAL | | 192 | 2 (1%) | 130 (68%) | 8 (4%) | 13 (7%) | 21 (11%) | 8 (4%) | 10 (5%) | 2.98 | 1.26 |
| Mathematics | KS3 | 63 | 2 | 0 | 4 | 13 | 19 | 15 | 10 | 3.23 | 1.16 |
| | KS4 | 129 | 0 | 0 | 7 | 24 | 38 | 52 | 8 | 3.23 | 1.00 |
| TOTAL | | 192 | 2 (1%) | 0 | 11 (6%) | 37 (19%) | 57 (30%) | 67 (35%) | 18 (9%) | 3.23 | 1.05 |
| Music | KS3 | 63 | 2 | 1 | 13 | 18 | 18 | 7 | 4 | 2.52 | 1.16 |
| | KS4 | 129 | 0 | 110 | 2 | 6 | 3 | 6 | 2 | 3.00 | 1.25 |
| TOTAL | | 192 | 2 (1%) | 111 (58%) | 15 (8%) | 24 (13%) | 21 (11%) | 13 (7%) | 6 (3%) | 2.63 | 1.19 |
| Religious Education | KS3 | 63 | 2 | 0 | 7 | 15 | 29 | 10 | 0 | 2.69 | .87 |
| | KS4 | 129 | 0 | 26 | 26 | 40 | 25 | 12 | 26 | 2.22 | .96 |
| TOTAL | | 192 | 2 (1%) | 26 (15%) | 33 (17%) | 55 (29%) | 54 (28%) | 22 (11%) | 26 (14%) | 2.40 | .96 |

| | Key Stage | No. | No response | N/A | Very easy | Easy | Fine | Hard | Very hard | Mean* | Std. Deviation |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sciences | KS3 | 63 | 2 | 0 | 3 | 9 | 22 | 14 | 13 | 3.41 | 1.13 |
| | KS4 | 129 | 0 | 0 | 5 | 16 | 38 | 48 | 22 | 3.51 | 1.04 |
| TOTAL | | 192 | 2 (1%) | 0 | 8 (4%) | 25 (13%) | 60 (31%) | 62 (32%) | 35 (18%) | 3.48 | 1.07 |

**Table 6.1** demonstrates that of all the subjects, Mathematics was the sole subject to not see a difference in perception of challenge between the two key stages, and only ICT, Languages and Religious Education were perceived as less challenging from KS3 students through to KS4 students.

Independent-samples t-tests were conducted to compare KS3 and KS4 student perceptions of the difficulty of each subject. There were statistically significant differences at the $p < .05$ level in several subjects (**Table 6.2**). Of these subjects, students in KS4 indicated higher levels of challenge in Art and Drama than students in KS3, with a large effect size seen in the differences between Key Stages for Art and a small effect size seen in the differences for Drama. Students in KS3 indicated higher levels of challenge in Languages and Religious Education than KS4 students. There was a small effect size seen in the differences for Languages and a moderate effect size for the differences in Religious Education. Therefore, the differences between Key Stages were most significantly seen in Art.

## Table 6.2 Differences in Student perception of subject work

| | Key Stage | No. | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|
| Art | KS3 | 59 | 2.03 | .77 | t = -5.20 (102), p = .001 eta = .19 |
| | KS4 | 55 | 2.89 | .98 | |
| Drama | KS3 | 58 | 2.31 | 1.06 | t = -2.24 (88), p = .03 eta = .05 |
| | KS4 | 32 | 2.84 | 1.11 | |
| Language/s | KS3 | 61 | 3.54 | 1.25 | t = 2.39 (187), p = .02 eta = .03 |
| | KS4 | 128 | 3.11 | 1.12 | |
| Religious Education | KS3 | 61 | 2.69 | .89 | t = 3.09 (162), p = .001 eta = .06 |
| | KS4 | 103 | 2.22 | .96 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

### 6.2.3 Student perception of change in work difficulty

When asked if they perceived a difference in the difficulty of their schoolwork compared to the work they had been given in the previous year, the survey data revealed that KS4 perceived a greater increase than KS3 in the difficulty of work completed compared to the previous academic year (**Table 6.3**). This question was also linked to the second research question: How do girls in the transition between KS3 and KS4 in the selective independent sector feel about the level of challenge in their current work? It was asked to confirm the impression given by the student responses shown in **Table 6.1**.

## Table 6.3 Student perception of change in work difficulty

| Q. Do you notice a difference in the standard of work you complete this year compared to last year? | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Key Stage** | **No.** | **No response** | **I think that the standard of work this year is easier in all subjects** | **I think that the standard of work this year is easier in some subjects** | **I think that the standard of work this year is much the same as last year** | **I think that the standard of work this year is harder in some subjects** | **I think that the standard of work this year is harder in all subjects** | **Mean** | **Std. Deviation** |
| KS3 | 61 | 2 | 2 | 4 | 4 | 42 | 9 | 3.85 | .87 |
| KS4 | 129 | 0 | 0 | 3 | 14 | 55 | 57 | 4.29 | .75 |
| TOTAL | 190 | 2 (1%) | 2 (1%) | 7(4%) | 18 (9%) | 97 (51%) | 66 (34%) | 4.15 | .82 |

An independent-samples t-test was conducted to compare student perception of change in work difficulty by Key Stage across the whole sample. A statistically significant difference at the p = < 0.5 level was found, with KS4 students perceiving more of an increase in difficulty from previous years work compare to KS3 students (**Table 6.4**). The effect size was moderate.

## Table 6.4 Comparison of student perception of change in work difficulty

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| Do you notice a difference in the standard of work you complete this year compared to last year? | KS3 | 61 | 2 | 3.85 | .87 | t = -3.53 (188), p = .00 eta = .06 |
| | KS4 | 129 | 0 | 4.29 | .75 | |

* (1 = easier in all subjects; 2 = easier in some subjects; 3 = much the same; 4 = harder in some subjects; 5 = harder in all subjects)

### 6.2.4 Student preference for harder or easier work

To understand further student feelings towards challenging work, the survey asked respondents to indicate a preference for easier or harder work. The survey data revealed that there was relatively strong disagreement with the idea that they would like their schoolwork to be harder. This indicates that the students did not want more challenging work (**Table 6.5**).

## Table 6.5 Student preference for harder or easier work

| Q. Would you like your schoolwork to be easier or harder? | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Key Stage** | **No.** | **No response** | **I would like my schoolwork to be easier in all subjects** | **I would like my schoolwork to be easier in some subjects** | **I think that the level of my schoolwork is about right** | **I would like my schoolwork to be harder in some subjects** | **I would like my schoolwork to be harder in all subjects** | **Mean** | **Std. Deviation** |
| KS3 | 63 | 2 | 0 | 24 | 26 | 10 | 1 | 2.80 | .77 |
| KS4 | 129 | 0 | 1 | 67 | 51 | 9 | 1 | 2.55 | .67 |
| TOTAL | 192 | 2 (1%) | 1 (1%) | 91 (47%) | 77 (40%) | 19 (10%) | 2 (1%) | 2.63 | .71 |

An independent-samples t-test as conducted to compare student preference for harder or easier work by Key Stage across the whole sample. A statistically significant difference at the p = < 0.5 level was found, with students in KS4 indicating a stronger preference for easier work than students in KS3 (**Table 6.6**). However, the effect size was small.

## Table 6.6 Comparison of student preference for harder or easier work

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| Would you like your schoolwork to be easier (1) or harder (5) | KS3 | 63 | 2 | 2.80 | .77 | t = 2.31 (188), p = .02 eta = .03 |
| | KS4 | 129 | 0 | 2.55 | .67 | |

* (1 = easier in all subjects; 2 = easier in some subjects; 3 = level is about right; 4 = harder in some subjects; 5 = harder in all subjects)

### 6.2.5 Student reasons for preference for easier work

When asked to respond to reasons for a preference for easier work, the survey data indicated that many students felt neutral (36%) towards the statement 'I would not like my schoolwork to be easier'. However, 33% of students disagreed or strongly disagreed with this statement, as compared with 25% who agreed or strongly agreed (M = 2.87) (**Table 6.7**).

## Table 6.7 Student reasons for preference for easier work

| Q. If you would like your schoolwork to be easier, why is this? | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. | No response | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean* | Std. Deviation |
| I would not like my schoolwork to be easier | KS3 | 63 | 4 | 7 | 13 | 24 | 13 | 2 | 2.83 | 1.02 |
| | KS4 | 129 | 7 | 10 | 34 | 45 | 25 | 8 | 2.89 | 1.04 |
| TOTAL | | 192 | 11 (6%) | 17 (9%) | 47 (24%) | 69 (36%) | 38 (20%) | 10 (5%) | 2.87 | 1.03 |
| I find the difficulty of the work can make me stressed | KS3 | 63 | 3 | 2 | 7 | 10 | 28 | 13 | 3.72 | 1.04 |
| | KS4 | 129 | 7 | 1 | 7 | 14 | 64 | 36 | 4.04 | .85 |
| TOTAL** | | 192 | 10 (5%) | 3 (2%) | 14 (7%) | 24 (13%) | 92 (48%) | 49 (26%) | 3.93 | .93 |
| I find some of the work irrelevant | KS3 | 63 | 5 | 2 | 12 | 17 | 19 | 8 | 3.33 | 1.07 |
| | KS4 | 129 | 8 | 1 | 21 | 33 | 52 | 14 | 3.47 | .94 |
| TOTAL | | 192 | 13 (7%) | 3 (2%) | 33 (17%) | 50 (26%) | 71 (37%) | 22 (11%) | 3.42 | .98 |
| You can get better before pushing your-self further if the work is at an easier level | KS3 | 63 | 6 | 2 | 13 | 15 | 21 | 6 | 3.28 | 1.05 |
| | KS4 | 129 | 9 | 3 | 28 | 50 | 30 | 9 | 3.12 | .94 |
| TOTAL** | | 192 | 15 (8%) | 5 (3%) | 41 (21%) | 65 (34%) | 51 (27%) | 15 (8%) | 3.17 | .97 |

*Mean: 1 = strongly disagree; 5 = strongly agree

** Percentages have been rounded up and therefore do not necessarily come to 100%

The data, however, indicates that there was moderate agreement with the reasons for preference for easier work that were taken from the focus groups. The greatest agreement was that the difficulty of work could lead to stress (M = 3.93). This was closely followed by moderate agreement with the statement re-

ferring to some work being irrelevant (M = 3.42) and then the idea that students can get better at something if the work is easier before pushing themselves further (M = 3.17).

An independent-samples t-test was conducted to compare student reasons for preference for easier work by Key Stage. No statistically significant differences in the perceptions of KS3 and KS4 students were found.

Table 6.8 shows other reasons that the survey respondents offered for a preference for easier work. These revealed different attitudes held by the students. The first two statements indicate that the pace or the difficulty of the work in the lesson sometimes meant that the students wanted easier work. The third statement indicates that one student did not feel that the work was too hard but that they received a large amount of work.

## Table 6.8 'Other' reasons for preference for easier work

| **Q. If you would like your schoolwork to be easier, why is this?** | |
|---|---|
| **KS3** | I find some work hard because I don't feel like I have grasped the concept of what we have learnt and don't understand it in the lesson. |
| **KS4** | I would like things to be slowed down in some lessons |
| **KS4** | It's not the work that is hard - it's the amount we get |

### 6.2.6 Student reasons for preference for harder work

The survey also asked students to indicate their preference for harder work. This was to ascertain the extent to which students held positive feelings towards challenging work.

There was strong agreement with the statement 'I would not like my school-work to be harder (M = 3.42, **Table 6.9**). This again confirmed that the students surveyed were ambivalent about embracing the prospect of more challenging work.

## Table 6.9 Student reasons for preference for harder work

| **Q. If you would like your schoolwork to be harder, why is this?** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Key Stage** | **No.** | **No response** | **Strongly Disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** | **Mean*** | **Std. Dev.** |
| I would not like my schoolwork to be harder | KS3 | 63 | 3 | 7 | 6 | 22 | 17 | 8 | 3.22 | 1.17 |
| | KS4 | 129 | 2 | 7 | 9 | 46 | 42 | 23 | 3.51 | 1.05 |
| TOTAL | | 192 | 5 (3%) | 14 (7%) | 15 (8%) | 68 (35%) | 59 (31%) | 31 (16%) | 3.42 | 1.09 |
| I feel that I am more likely to learn more from what I'm doing wrong | KS3 | 63 | 6 | 2 | 12 | 16 | 23 | 4 | 3.26 | .99 |
| | KS4 | 129 | 7 | 6 | 22 | 39 | 51 | 4 | 3.20 | .94 |
| TOTAL** | | 192 | 13 (7%) | 8 (4%) | 34 (18%) | 55 (29%) | 74 (39%) | 8 (4%) | 3.22 | .96 |
| I want to put my knowledge into use/apply it to new situations | KS3 | 63 | 5 | 1 | 6 | 21 | 23 | 7 | 3.50 | .90 |
| | KS4 | 129 | 6 | 3 | 14 | 44 | 56 | 6 | 3.39 | .85 |
| TOTAL | | 192 | 11 (6%) | 4 (2%) | 20 (10%) | 65 (34%) | 79 (41%) | 13 (7%) | 3.22 | .96 |
| I sometimes want to know a little bit more | KS3 | 63 | 5 | 1 | 7 | 15 | 30 | 5 | 3.53 | .88 |
| | KS4 | 129 | 4 | 6 | 17 | 36 | 56 | 10 | 3.38 | .98 |
| TOTAL** | | 192 | 9 (5%) | 7 (4%) | 24 (13%) | 51 (27%) | 86 (45%) | 15 (8%) | 3.43 | .95 |
| I find the work can be repetitive | KS3 | 63 | 6 | 3 | 12 | 23 | 12 | 7 | 3.14 | 1.06 |
| | KS4 | 129 | 7 | 2 | 26 | 38 | 48 | 8 | 3.28 | .93 |
| TOTAL** | | 192 | 13 (7%) | 5 (3%) | 38 (20%) | 61 (32%) | 60 (31%) | 15 (8%) | 3.23 | .97 |
| Sometimes we are | KS3 | 63 | 4 | 1 | 16 | 11 | 18 | 13 | 3.44 | 1.16 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| challenged in quantity rather than quality | KS4 | 129 | 5 | 5 | 11 | 27 | 44 | 37 | 3.78 | 1.09 |
| TOTAL | | 192 | 9 (5%) | 6 (3%) | 27 (14%) | 38 (20%) | 62 (32%) | 50 (26%) | 3.67 | 1.13 |

*Mean: 1 = strongly disagree; 5 = strongly agree

** Percentages have been rounded up and therefore do not necessarily come to 100%

With regard to the statements relating to the reasons why students would prefer harder work (**Table 6.18**) the greatest agreement was found for the statement 'Sometimes we are challenged in quantity rather than quality' (M = 3.67); followed by 'I sometimes want to know a little bit more' (M= 3.43); 'I find the work can be repetitive' (M = 3.23); and 'I feel that I am more likely to learn more from what I'm doing wrong' (M= 3.22) and 'I want to put my knowledge into use/apply it to new situations' (M= 3.22).

An independent-samples t-test was carried out to compare student reasons for a preference for more difficult work by Key Stage across all of the data. No statistically significant difference was found.

Two survey students offered other reasons as to why they would prefer harder work (**Table 6.10**). Both of these statements conveyed the sense that the students who provided them felt they sometimes would prefer to have one more challenging task in the place of a large amount of easier work.

## Table 6.10 Other reasons for preference for harder work

| Q. If you would like your schoolwork to be harder, why is this? | |
|---|---|
| KS3 | Instead of having a lot of easy work we should have one piece of hard work |
| KS4 | I very strongly agree with the final statement [Sometimes we are challenged in quantity rather than quality] and would much rather we went into more detail on certain topics than aiming to cover lots of ground with little depth. |

### 6.2.7 Student enjoyment of current work

Students were asked about how much they enjoyed their current work to see whether there was a link between this and the moderate level of challenge they perceived in their current work. The survey data showed that the majority of students felt neutral in terms of enjoying their current work ($\underline{M}$ = 3.07) (**Table 6.11)**. However, slightly more students indicated that they enjoyed their current work (29%) than not (23%).

## Table 6.11 Student enjoyment of current work

| Q. On a scale of 1 to 5 with 5 being the highest, how much do you enjoy the schoolwork you are currently given to complete? | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Key Stage** | **No.** | **No response** | **1** | **2** | **3** | **4** | **5** | **Mean*** | **Std. Deviation** |
| On a scale of 1 to 5 with 5 being the highest, how much do you enjoy the schoolwork you are currently given to complete? | KS3 | 63 | 2 | 1 | 8 | 25 | 23 | 4 | 3.34 | .85 |
| | KS4 | 129 | 0 | 6 | 28 | 66 | 25 | 4 | 2.95 | .85 |
| TOTAL | | 192 | 2 (1%) | 7 (4%) | 36 (19%) | 91 (47%) | 48 (25%) | 8 (4%) | 3.07 | .88 |

*Mean: 1 = low enjoyment; 5 = high enjoyment

Independent-samples t-tests were conducted to compare student enjoyment of current work by Key Stage across the whole sample. There was a statistically significant difference at the $p < .05$ level in the enjoyment of work by students in KS3 ($\underline{M} = 3.34$, $\underline{SD} = .85$) and KS4 ($\underline{M} = 2.95$, $\underline{SD} = .85$): $t = 3.01$ (188), $p = .00$ (**Table 6.12**). This suggests that students in KS3 enjoyed their current work more than students in KS4, although the effect size was small.

## Table 6.12 Comparison of student enjoyment of current work

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| On a scale of 1 to 5 with 5 being the highest, how much do you enjoy the schoolwork you are currently given to complete? | KS3 | 63 | 2 | 3.34 | .85 | t = 3.01 (188), p = .00 eta = .05 |
| | KS4 | 129 | 0 | 2.95 | .85 | |

*Mean: 1 = low enjoyment; 5 = high enjoyment

### 6.2.8 Frequency with which students complete extension tasks

Whilst the survey data indicated that students were not overly challenged by their current work (**Section 6.4.1**), when asked to indicate the frequency with which they completed extension tasks – work that would offer additional challenge for students – their responses indicated that they completed extension work infrequently (**Table 6.13**). This links with the second of my research questions, as completion of extension work would indicate feelings towards this form of challenging work.

## Table 6.13 Frequency of extension work completion

| Q. How often do you complete extension tasks? | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. | No response | Never | Sometimes | Often | Always | Mean* | Std. Deviation |
| Optional essays | KS3 | 63 | 5 | 33 | 23 | 3 | 1 | 1.53 | .68 |
| | KS4 | 129 | 4 | 76 | 37 | 11 | 1 | 1.50 | .69 |
| TOTAL | | 192 | 9 | 109 | 60 | 14 | 2 | 1.51 | .69 |
| Planning/ carrying out additional scientific experiments | KS3 | 63 | 5 | 20 | 27 | 11 | 2 | 1.92 | .81 |
| | KS4 | 129 | 4 | 72 | 40 | 11 | 2 | 1.54 | .72 |
| TOTAL | | 192 | 9 | 92 | 67 | 22 | 4 | 1.66 | .77 |
| A research task/ homework that goes beyond the syllabus content | KS3 | 63 | 5 | 8 | 35 | 14 | 3 | 2.20 | .73 |
| | KS4 | 129 | 4 | 24 | 63 | 34 | 7 | 2.15 | .09 |
| TOTAL | | 192 | 9 | 32 | 98 | 47 | 8 | 2.17 | .76 |
| Extension questions | KS3 | 63 | 5 | 6 | 19 | 26 | 9 | 2.63 | .86 |
| | KS4 | 129 | 4 | 14 | 58 | 43 | 10 | 2.39 | .79 |
| TOTAL | | 192 | 9 | 20 | 77 | 69 | 19 | 2.47 | .82 |

* Mean: 1 = never; 2 = sometimes; 3 = often; 4 = always

The descriptions of extension work were adapted from suggestions made by the students in the focus groups: optional essays, planning or carrying out additional scientific experiments, research tasks or homework that went beyond syllabus content and extension questions. The survey respondents were asked to indicate whether they never, sometimes, often or always completed these extension activities. Although the survey data indicated a low frequency of take-up

of the extension tasks, some students did convey completion of such activities with extension questions being the most completed (M = 2.47) and optional essays the least completed (M = 1.51) (**Table 6.12**).

Independent-samples t-tests were conducted to compare student completion of extension tasks by Key Stage. There was a statistically significant difference at the $p < .05$ level for the frequency with which students said they completed the extension task of planning or carrying out additional scientific experiments (**Table 6.14**). This indicates that KS3 students were more likely to complete this type of extension task, although the difference between the two key stages remains small.

## Table 6.14 Comparison of frequency of extension work completion

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| Planning/ carrying out additional scientific experiments | KS3 | 63 | 5 | 1.92 | .81 | t = 3.15 (183), p = .02 eta = .05 |
| | KS4 | 129 | 4 | 1.54 | .72 | |

* Mean: 1 = never; 2 = sometimes; 3 = often; 4 = always

### 6.2.9 Student preference of extension tasks

To further understand student feelings towards challenging work, the students were asked to indicate which type of extension tasks they preferred to complete (**Table 6.15**). Optional essays (M = 2.36) and planning/carrying out additional scientific experiments (M = 2.75) were not as popular extension tasks as research tasks (M = 3.03) or extension questions (M = 3.49).

## Table 6.15 Preference for extension work

| Q. What type of extension tasks do you prefer to complete? | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. | No response | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev. |
| Optional essays | KS3 | 63 | 3 | 8 | 22 | 22 | 7 | 1 | 2.52 | .93 |
| | KS4 | 129 | 4 | 31 | 48 | 26 | 19 | 1 | 2.29 | 1.03 |
| TOTAL | | 192 | 7 (4%) | 39 (20%) | 70 (37%) | 48 (25%) | 26 (14%) | 2 (1%) | 2.36 | 1.00 |
| Planning/ carrying out additional scientific experiments | KS3 | 63 | 3 | 4 | 12 | 20 | 19 | 5 | 3.15 | 1.06 |
| | KS4 | 129 | 4 | 24 | 42 | 29 | 25 | 5 | 2.56 | 1.13 |
| TOTAL | | 192 | 7 (4%) | 28 (15%) | 54 (28%) | 49 (26%) | 44 (23%) | 10 (5%) | 2.75 | 1.14 |
| A research task/ homework that goes beyond the syllabus content | KS3 | 63 | 3 | 4 | 14 | 22 | 15 | 5 | 3.05 | 1.05 |
| | KS4 | 129 | 4 | 16 | 24 | 31 | 50 | 4 | 3.02 | 1.11 |
| TOTAL | | 192 | 7 (4%) | 20 (10%) | 38 (20%) | 53 (28%) | 65 (34%) | 9 (5%) | 3.03 | 1.09 |
| Extension questions | KS3 | 63 | 3 | 1 | 4 | 14 | 30 | 11 | 3.77 | .89 |
| | KS4 | 129 | 4 | 11 | 11 | 37 | 55 | 11 | 3.35 | 1.06 |
| TOTAL | | 192 | 7 (4%) | 12 (6%) | 15 (8%) | 51 (27%) | 85 (44%) | 22 (12%) | 3.49 | 1.02 |

Independent-samples t-tests were conducted to compare student preference for extension tasks by Key Stage. There was a statistically significant difference at the $p < .05$ level for student preference for planning or carrying out additional scientific experiments and extension questions (**Table 6.16**). This indicates that KS3 students were more likely to prefer these types of extension task, although the difference between the two key stages was moderate for the scientific experiments and small for the extension questions.

## Table 6.16 Comparison of preference for extension work

| | Key Stage | No. | No response | Mean | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| Planning/ carrying out additional scientific experiments | KS3 | 63 | 3 | 3.15 | 1.06 | t = 3.39 (183), p = .001 eta = .06 |
| | KS4 | 129 | 4 | 2.56 | 1.13 | |
| Extension questions | KS3 | 63 | 3 | 3.77 | .89 | t = 2.62 (183), p = .01 eta = .04 |
| | KS4 | 129 | 4 | 3.35 | 1.06 | |

Several survey students provided other types of extension tasks that they liked to complete (**Table 6.17**). The suggestions of 'Extra questions on the same topic which are possibly a bit harder' and 'Questions that involve applying all your knowledge or in languages using different tenses in essay work' are quite similar to the survey statement 'Extension questions', although the survey students have provided additional clarification of what extension questions might look like. The suggestion of 'Things which allow us to be creative in our way of learning' added a new element to the idea of what extension work might look like, as creative application of their knowledge had not appeared in the survey. Finally, the reference to the difficulty of knowing whether to revise the knowledge gained from research tasks completed as part of extension work, seen in the first statement in **Table 6.17**, perhaps reveals some of the tension felt by students when deciding whether or not to complete extension tasks. This statement indicated that the student has an expectation that work leads towards summative assessment.

## Table 6.17 Other extension tasks students like to complete

| | |
|---|---|
| **KS3** | Sometimes the research task that goes beyond syllabus content, however when it comes to revising you don't know whether you will need to revise it or not |
| **KS4** | Extra questions on the same topic which are possibly a bit harder |
| **KS4** | Questions that involve applying all your knowledge or in languages using different tenses in essay work |
| **KS4** | Things which allow us to be creative in our way of learning |

### 6.2.10 Student perceptions of attainment versus understanding

The students were asked what was more important to them, understanding or attainment, in order to investigate the goal aspirations of the students. The students largely indicated that they did not believe it was possible to have attainment without understanding (**Table 6.18**).

## Table 6.18 Student perceptions of importance of understanding versus attainment

| Q. What's more important to you, understanding or attainment? | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. | No response | I think understanding is more important than attainment | I think attainment is more important than understanding | You cannot have attainment without understanding | Mean | Std. Dev. |
| What's more important to you, understanding or attainment? | KS3 | 63 | 3 | 16 | 4 | 40 | 2.40 | .89 |
| | KS4 | 129 | 4 | 29 | 14 | 82 | 2.42 | .85 |
| TOTAL | | 192 | 7 (4%) | 45 (23%) | 18 (10%) | 122 (64%) | 2.42 | .86 |

Independent-samples t-tests were carried out to compare the differences between the Key Stages. No statistically significant differences were found.

### 6.2.11 Student perceptions of GCSE: subject choice and feelings towards examinations

The students who completed the survey were asked questions relating to GCSEs to investigate whether this revealed anything further about how their perceptions of challenge within their work and their ability to achieve might be linked or the extent to which the students were open to completing more challenging work.

KS3 students were asked questions on how they felt about starting their GCSE courses the following year. KS4 students were asked questions about how they chose their GCSE subjects and how they felt towards their GCSE examinations. These questions were linked to the first of my research questions: how girls in the selective independent sector feel about challenging work.

**Table 6.19** shows that the Year 9 (KS3) students held strong agreement with all of the statements related to their feelings about starting their GCSE subjects apart from 'I lack the motivation to work hard in the subjects I don't intend to

study at GCSE' (M = 2.93). However, the strongest agreement was held with the statement 'I am working harder this year in the subjects I intend to carry on next year' (M = 4.07) and there was also strong agreement with the statement 'I'm worried that the work in Year 10 is going to be a big jump from Year 9 work' (M = 3.97), both of which indicate that the students surveyed were concerned about an increased level of challenge in their work, and possibly their achievement at GCSE, before they started their courses.

## Table 6.19 KS3 feelings towards starting GCSE courses

| **Q. How do you feel about starting your GCSE subjects next year?** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. | No response | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev. |
| I'm worried that the work in Year 10 is going to be a big jump from Year 9 work | 63 | 2 (3%) | 0 | 5 (8%) | 7 (11%) | 34 (54%) | 15 (24%) | 3.97 | .84 |
| I don't know what to expect when I start my GCSE courses | 63 | 2 (3%) | 0 | 7 (11%) | 14 (22%) | 27 (43%) | 13 (21%) | 3.75 | .91 |
| I'm quite excited about starting GCSEs next year | 63 | 2 (3%) | 3 (5%) | 7 (11%) | 15 (24%) | 32 (51%) | 4 (6%) | 3.44 | .96 |
| I am working harder this year in the subjects I intend to carry on next year | 63 | 2 (3%) | 0 | 1 (2%) | 11 (17%) | 32 (51%) | 17 (27%) | 4.07 | .73 |
| I lack the motivation to work hard in the subjects I don't intend to study at GCSE | 63 | 2 (3%) | 6 (2%) | 22 (67%) | 11 (17%) | 14 (22%) | 8 (13%) | 2.93 | 1.24 |

Several students provided additional comments on how they felt about starting their GCSE courses (**Table 6.20**). The first statement revealed the tension this student felt between focused study in the subjects she wanted to do, whilst having to give up other subjects she might like to continue with. One student was still unsure about which subjects to choose. The final comment, 'I'm worried I won't be able to keep up with all the work' is similar to the survey statement 'I'm worried that the work in Year 10 is going to be a big jump from Year 9 work' but conveys more of a sense of not being able to maintain a required standard of work rather than the work just being more difficult than it was in Year 9.

## Table 6.20 Other feelings towards starting GCSE courses

| **Q. How do you feel about starting your GCSE subjects next year?** | |
|---|---|
| KS3 | I am looking forward to focusing on the subjects I want to do although I think I will be giving up more subjects than I would like to. |
| KS3 | I still don't really know what I'll do for GCSE |
| KS3 | I'm worried I won't be able to keep up with all the work |

A similar pattern was found in the responses of KS4 students to their survey questions about their GCSE courses. In response to the question, 'How did you make your GCSE choices?', **Table 6.21** shows there was low agreement with the statement 'The subjects which I found more challenging, I dropped' ($\underline{M}$ = 2.73), again showing a more positive attitude towards challenging work than had perhaps been indicated in **Section 6.4.7**. However, there was still relatively high agreement with the statement 'I made decisions based on how well I was doing in particular subjects' ($\underline{M}$ = 3.71), and although this statement did not

receive as strong an agreement as the statement 'I picked the subjects I really enjoyed' (M = 3.90), it was not that much lower.

## Table 6.21 Factors behind GCSE subject choice by KS4 students

| **Q. How did you make your GCSE choices?** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | No. (100% response) | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev. |
| I picked the subjects I really enjoyed | 129 | 0 | 8 (6%) | 24 (19%) | 70 (54%) | 27 (21%) | 3.90 | .80 |
| I based my subject choices on what I'll get out of a subject in the long run e.g. university place, career | 129 | 6 (5%) | 20 (16%) | 31 (24%) | 56 (43%) | 16 (12%) | 3.43 | 1.05 |
| I made decisions based on how well I was doing in particular subjects | 129 | 0 | 11 (9%) | 29 (23%) | 76 (59%) | 13 (10%) | 3.71 | .76 |
| I wanted to have a mix of subjects to keep my options open for the future | 129 | 2 (2%) | 22 (17%) | 33 (26%) | 55 (43%) | 17 (13%) | 3.49 | .98 |
| I chose subjects I felt that my parents/ teachers wanted me to choose | 129 | 26 (20%) | 59 (46%) | 22 (17%) | 17 (13%) | 5 (4%) | 2.35 | 1.07 |
| I based my choices on the experiences of an older sibling | 129 | 50 (39%) | 39 (30%) | 27 (21%) | 13 (10%) | 0 | 2.02 | 1.00 |
| The subjects which I found more challenging, I dropped | 129 | 19 (15%) | 42 (33%) | 33 (26%) | 25 (19%) | 10 (8%) | 2.73 | 1.16 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| I found it really hard to decide which subjects to choose | 129 | 9 (7%) | 32 (25%) | 34 (27%) | 41 (32%) | 13 (7%) | 3.13 | 1.11 |
| I am pleased with the subjects I have chosen | 129 | 4 (3%) | 8 (6%) | 33 (17%) | 50 (39%) | 34 (26%) | 3.79 | 1.01 |

One student offered another reason for her GCSE subject choice (Table 6.22). This reason is similar to the survey statement 'I picked the subjects I really enjoyed' but the word 'boring' indicates that a perceived negative view of a particular subject can influence subject choice as well as perceived positive aspects of subjects that are chosen by a particular student.

## Table 6.22 Other factors behind GCSE subject choice by KS4 students

| **Q. How did you make your GCSE choices?** | |
|---|---|
| KS4 | I dropped the subjects I found boring. |

Year 10 and Year 11 students were asked how they felt towards their GCSE examinations. These results for this question are recorded for each year group separately, as there might have been a difference in perception between the two year groups, given that Year 11 students would be sitting the examinations sooner than Year 10 students. This might therefore have an effect on the perception of Year 11 students towards the GCSE examination that might be different from Year 10 students who would not have to sit the examinations for another academic year.

There was fairly high agreement with the statement 'For the subjects I'm not very good at I'm scared; but for the subjects I'm feeling confident in right now I'm not too worried yet' ($\underline{M}$ = 3.74), which could again indicate a link between the perception of challenge within a subject and a student's perception of their ability within that subject. However, the high level of worry towards their

GCSE examinations indicated by **Table 6.22**, suggested by the high agreement with the statement 'I feel worried about my GCSE examinations' (M = 4.23) and the low agreement with the statement 'I'm not as worried as I used to be when I was younger because I realise that I can keep up with the workload' (M = 2.88), in combination with the low level of perceived challenge in their current work referred to in **Section 6.2.2**, indicates that the worry the students acknowledged is not necessarily linked to the level of challenge perceived in the work itself and perhaps more to the fact of having to complete GCSE examinations.

## Table 6.22 KS4 feelings towards GCSE examinations

| **Q. How do you feel about your GCSE examinations?** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Year Group | No. (100%) | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev. |
| I feel worried about my GCSE examinations | 10 | 64 | 0 | 2 | 7 | 28 | 27 | 4.25 | .78 |
| | 11 | 65 | 2 | 3 | 7 | 20 | 33 | 4.22 | 1.02 |
| TOTAL | | 129 | 2 (2%) | 5 (4%) | 14 (11%) | 48 (37%) | 60 (31%) | 4.23 | .91 |
| I'm not as worried as I used to be when I was younger because I realise that I can keep up with the workload | 10 | 64 | 5 | 15 | 24 | 20 | 0 | 2.92 | .93 |
| | 11 | 65 | 7 | 21 | 17 | 16 | 4 | 2.83 | 1.11 |
| TOTAL | | 129 | 12 (9%) | 36 (28%) | 41 (32%) | 36 (28%) | 4 (3%) | 2.88 | 1.02 |
| I don't feel that the GCSEs are real for me yet | 10 | 64 | 1 | 22 | 15 | 20 | 6 | 3.12 | 1.05 |
| | 11 | 65 | 4 | 12 | 15 | 21 | 13 | 3.42 | 1.18 |
| TOTAL | | 129 | 5 (4%) | 34 (26%) | 30 (23%) | 41 (32%) | 19 (15%) | 3.27 | 1.12 |
| For the subjects I'm not very good at I'm scared; but for the subjects I'm feeling confident in right now I'm not too worried yet | 10 | 64 | 1 | 7 | 16 | 23 | 17 | 3.75 | 1.02 |
| | 11 | 65 | 2 | 10 | 9 | 26 | 18 | 3.74 | 1.12 |
| TOTAL | | 129 | 3 (2%) | 17 (26%) | 25 (19%) | 49 (38%) | 35 (27%) | 3.74 | 1.07 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| I think that the GCSEs motivate me to work harder: everything you do in Year 10 and Year 11 is important | 10 | 64 | 0 | 2 | 21 | 26 | 15 | 3.84 | .82 |
| | 11 | 65 | 3 | 9 | 15 | 27 | 11 | 3.52 | 1.08 |
| TOTAL | | 129 | 3 (2%) | 11 (9%) | 36 (28%) | 53 (41%) | 26 (20%) | 3.68 | .97 |

When an independent-samples t-test was conducted to compare the differences between Year 10 and Year 11 students with regard to their feelings towards the GCSE examinations across the whole sample, no statistically significant differences were actually found.

## 6.3 The relationship between the focus groups and the survey

Both the focus group participants and those who completed the survey indicated that they were not overly challenged by their current work, the surveys indicating only small differences in perception of challenge between different subjects, year groups and schools. Focus group students had indicated that the challenge in work depended on the topic and time of year, and the survey built upon this by indicating that KS4 students perceived the greatest increase in work difficulty from previous years than KS3 students.

There was an indication in the focus groups that the perception of the difficulty of work is linked to perceptions of one's ability to achieve in a subject. This was also reflected by the Year 10 and Year 11 survey respondents in their strong agreement with the statement that they chose their GCSE subjects based on how well they perceived they were doing in those subjects.

Finally, some participants in the focus groups had indicated that they were open to the option of completing more challenging work but this was not a feeling widely shared by the survey respondents. KS4 students showed most disagreement with the idea of more challenging work, with stress and irrelevant work

being amongst the most popular reasons for not desiring more challenging work. This was seen in the negative feelings towards GCSE examinations exhibited by KS4 students coupled with the indication that they had a lesser sense of enjoying their current work than KS3 students. KS3 and KS4 students reported a low frequency of completion of the types of extension tasks suggested by the focus groups, tasks generally designed by teachers to provide more challenge for students.

## Summary

This chapter has explored the perceptions of girls in the selective independent sector of the levels of challenge in their schoolwork. There were some similarities in the responses given by both focus group and survey participants but the survey also helped to build upon the picture created by the focus group students. Both the focus groups and the survey data indicated that the students did not feel challenged by their current work but the survey showed disagreement with the idea that their work could be more challenging. The survey showed that there was a low frequency of completion of the types of extension task suggested by the focus groups and that KS4 students reported enjoying their work less than KS3 students. KS4 students also reported negative feelings towards their GCSE examinations. Any statistically significant differences between KS3 and KS4 students were small.

The next chapter explores the factors the students perceive support or hinder their engagement with challenging work.

# Chapter 7: Student perceptions of factors that enable them to engage with challenging work

In Chapter 6, the findings reported indicated that the vast majority of the students in the focus groups and survey participants felt their schoolwork could be harder. However, the surveyed students also indicated that they did not always complete extension tasks, which are often created by teachers to increase the difficulty of challenge for students. This chapter seeks to address the question of why the take up of, and desire for, challenging work is low by presenting the factors that girls perceived as enabling them to engage with challenging work. It will also consider student perceptions of the impact of test and homework results, and teacher talk about learning. This chapter is linked to my third research question: Are there specific motivational factors or factors in the classroom environment that are associated with girls' readiness to engage with challenging work in the particular Key Stages of KS3 and KS4?

First of all, data extracted from the responses of Year 9 and Year 10 students during the focus groups is presented according to themes about student perceptions of the factors that enable them to engage with challenging work:

- the setting of personal challenges so that they can be their best;
- the role of student interest and perception of ability to achieve;
- the role of competition in the classroom;
- summative assessment;
- the role of teachers and the classroom's learning environment;

Data from the surveys that were carried out with students in Years 9, 10 and 11 will then be interrogated to build upon the picture created by the focus group findings. These will be structured according to the survey questions that were linked to student perception of challenge. Firstly, the extent to which students perceive their motivation to engage with challenging work lies with themselves will be explored, followed by a consideration of whether motivation was provided by summative assessment. The impact of the language about learning

used by teachers and parents will also be considered. Finally, the relationship between the focus groups and the survey will be discussed.

## 7.1 Focus Groups

### 7.1.1 Students engage with challenging work when they set themselves personal challenges so that they can be their best

There was a strong sense of personal responsibility for learning amongst the focus group students. Several comments suggested that the students believed that at the heart of whether or not they attempted extension tasks was their own motivation – the setting of personal goals so that they could achieve their best:

*"I also think quite a lot of motivation – if it's a poster or a project, I'm quite – I find it really satisfying when you finish something and you're actually proud of it so it's quite, yeah." (Year 9, Focus Group 2)*

*"I don't like letting myself down, I think that's the worst thing for me." (Year 10, Focus Group 1)*

*"Well, I think when they say that 'oh it's extension' then it makes you want to do it more, if that makes sense." (Year 10, Focus Group 1)*

*"I think it's about trying to beat your own personal, um, trying to just focus on yourself and how well you're doing instead of how well other people are doing." (Year 10, Focus Group 1)*

*"...for me it's more personal target and I tell myself I'm going to allot some time to write notes throughout the year because I know that in the summer exam period I go overboard and do loads and loads of notes and it does turn out ok but, um, I think I could distress that process by, um, doing it throughout the year." (Year 9, Focus Group 2)*

### 7.1.2 When students are interested, have the time and feel they are doing well they are more likely to attempt challenging tasks

Whether or not a task in a particular subject was perceived as interesting was a factor influencing some when deciding to attempt challenging tasks:

*"I think if you're interested in it and you feel like … it's something that you want to do well in, like, you're quite motivated by it, then you're naturally going to want a better result so you just try as best you can, I think." (Year 9, Focus Group 2)*

*"Em, the type of work probably would be, like, something quite long because you don't really have that much motivation to do it because it kind of drains you so like a long essay or question paper with, like, two pages or something." (Year 9, Focus Group 1)*

*"… if you're more interested in that subject you're more willing to do the extension whereas if it's something – if it's a subject you don't like you don't have any motivation." (Year 10, Focus Group 2)*

Focus group participants also indicated that they were less likely to complete challenging work if they did not feel that they had the time:

*"And also depending on how much work before, like the stuff we have to do. Depending on how much and how difficult and how long that's taken. Maybe if you think that's not as difficult and it hasn't taken you very long then you have – yeah, you kind of want to do the extension to show 'yeah, I can do a bit more than that'. But if it's quite a big – quite a lot and you've already found it difficult I think you kind of, by that point it's not as important." (Year 9, Focus Group 1)*

*"… personally I try to but it really depends on how much you've been given before. So, if it's, um, quite a large amount and then you've found that you've already gone over the time limit and it's quite lengthy to do more, then maybe you should just say to the teacher 'Well, I did all I could in the time'. But if you feel like you've, em, have enough time and you've found the work quite manageable then I would definitely do it." (Year 9, Focus Group 2)*

Some comments suggested that it was possible that the amount of interest the student had in the subject area could strongly influence the amount of time the student was willing to dedicate to the task; for example, some comments implied that they were willing to spend longer than their homework time if they wanted to:

***"Do you find that you go over your homework time quite often?***

*- Yeah.*

***Is it for every subject or does it depend on subjects?***

*- Um, it depends. If it's a subject where it's the result is like a result of how much effort you put into it then generally I do go over the time, but if it's something that's on a sheet then it's within time or under time.*

*- Usually, like, long homeworks, like English or History I often go, I go a bit over. Then if it's just like Maths where it's wrong or right answer I don't usually go over the time.*

***Do you mind when you go over the time or is it a choice you make, or do you feel like you have to do it in order to get it completed?***

*- It's definitely a choice-*

*- Yeah, definitely.*

*- Because you want to get the best you can.*

*- Yeah.*

*- If I'm interested in it then I don't mind spending a lot of time!" (Year 9 students, Focus Group 2)*

Some students indicated that their self-judgments of how well they could complete a task in a particular subject area could affect their decision to complete an extension task:

*"… if you found the standard stuff really hard then you're not that likely to be 'Oh yeah, I'll do more hard stuff.'" (Year 10, Focus Group 2)*

*"I think it depends on the subject because when it's, like, Maths or something I quite often do it because there's a right or wrong answer and, like, if you get it wrong it doesn't really matter, you can always learn from it and change it; but if it's something, um, like History extension questions are quite hard because they're usually, like – I find the online worksheets and things we've done they're usually quite a lot harder than the table whatever we've been doing before so sometimes I just don't really do those!" (Year 9, Focus Group 1)*

Another student indicated that her own motivation was important in determining the extent to which she would engage with challenging work:

***Do you notice if there's a difference in the standard of work you complete this year compared to last year?***

*Some people might say that not much has changed. I think a lot's changed. I think this year I can remember so much more. I've paid more attention in my lessons than I did last year. Actually, a massive amount.*

***Why do you think that is?***

*Um, because I decided that it was about time…you know I think I was just getting bored of not having the feeling of satisfaction that you guys describe. It is…kind of, you know, too much after a while, and you just want to be able to get some sort of self-satisfaction out of it.*

### 7.1.3 Competition provides challenges to do well in the classroom

Linked to a personal desire to do well, the existence of a form of competition in the classroom could, in some cases, motivate peers to attempt challenging work:

*"I'm quite competitive so it's trying to be better than other people or trying be, like, stay at the same standards as other people". (Year 10, Focus Group 1)*

*"… you want to maintain where you are, you don't want to fall behind." (Year 10, Focus Group 1)*

### 7.1.4 Summative assessments affect student motivation to attempt challenging work

For some, summative assessment, in the form of homework or assessments for example, could play a role in motivating students to complete challenging work:

*"I think… kind of obviously… knowing that you get something at the end of it. So maybe if you know that it's going to contribute to maybe, like, help you in an exam or like as a revision resource or even just kind of going to help you to show your skills it's kinda a motivation for it." (Year 9, Focus Group 1)*

*"… I … think the fact if it's a homework with a grade at the end of it you know that you need to work towards it so that it might go towards your end of year grade (agreement with this) or your report and everything so you know that you actually have to try, you can't just, like, wing it!" (Year 9, Focus Group 1)*

*"… when it's in your report that goes home to your parents you feel a lot more like you have to do well. I think that's good." (Year 9, Focus Group 1)*

GCSEs, a form of summative assessment, played the role of limiting the 'challenge within schoolwork as well as motivating some students to complete challenging work. Some participants indicated that there were constraints in the level of difficulty in their work due to the nature of their GCSE studies:

*"- …sometimes they challenge you quantity rather than quality and you feel you're doing the same thing over and over but you're not getting any better.*

*- Yeah, really repetitive.*

*- Yeah, and also because we're doing the GCSE course now and some subjects they only teach you what's going to be on the GCSE and sometimes you think 'Well, I want to know a little bit more'.*

*- But then again, on the other hand in some subjects they give you irrelevant things (a lot of agreement with this) and you think 'oh well, I'd quite like to be learning relevant topics'." (Year 10, Focus Group 2)*

However, there was also an indication that GCSEs could motivate students to want to work harder:

*"I think that GCSEs motivate me more because I think everything – like in Year 7, 8, 9, everything you did didn't really lead to anything in particular whereas everything you do in Year 10, you know you have to learn it for GCSE so you know it's important." (Year 10, Focus Group 1)*

### 7.1.5 Inspiring and motivated teachers and the classroom learning environment encourage some students to take risks with challenging work

The role played by teachers was a predominant topic amongst focus group participants when explaining which factors encouraged them to engage in challenging work. This included the role of the passion teachers had for the subject in motivating students to want to work hard as well as the teachers having belief in the ability of the students:

*"My feeling, like, that I'm taught by someone who I think doesn't think I'm going to get anywhere, it generally just goes wrong. If someone says to me, just even like slightly, like 'you know, you could get an A in this' or something it really helps 'cos immediately it just boosts my self-esteem, I find." (Year 10, Focus Group 1)*

*"I think it's really important for teachers to be really passionate about their subject and do something a bit different to the standard just going through the syllabus subject by subject so, maybe not going completely off the syllabus but just being more interac-*

*tive with the students so we're not just sitting and listening and actually just showing they're really interested." (Year 10, Focus Group 1)*

*"It's when the teacher's motivated, then the pupils are generally automatically motivated as well." (Year 10, Focus Group 1)*

*"... this happens quite a lot already but if the teachers are really motivated in what they're teaching you because if you feel that the teacher isn't really going to care what grade you get then you don't really mind when they're looking at your homework, they're just going to, like, skim past it for a second, then you might feel like 'why am I trying?' But if you feel that the teacher will look at it and read...quite – look at the work and understand the effort you put into it, I think that makes you try hard and that makes you get a good grade." (Year 9, Focus Group 2)*

*"...if your teacher's given you a lot of background to the particular subject then you might feel inspired to go find out more because you already understand it so it's not totally new." (Year 9, Focus Group 2)*

There was also an indication that teachers were most concerned with completing the GCSE syllabus and could lack passion in their teaching:

*"... with some teachers it feels as if they're just getting through the syllabus. It's much more interesting if they show more of a passion for it." (Year 10, Focus Group 1)*

Students could also be switched off if the relevance or difficulty of the task was not made clear, if there was a dominating focus on grades or if students were often compared to each other:

*"I feel like sometime some teachers expand on it and... I'm not so keen on it when a teacher expands on it and you're completely off topic and it sort of confuses you, whereas if someone expands – I think it's, it's really cool if someone can expand on the syllabus and make it sound really interesting by itself because there is interesting stuff on there it's about the way you portray it." (Year 10, Focus Group 1)*

*"...you need teachers to be realistic about the level of difficultly (agreement with this) because sometimes, let's say, if you're in a higher set for something a teacher might just assume 'Oh, this will be easy for all of you' and when you find it difficult it's demotivational, if that's a word, yeah." (Year 10, Focus Group 2)*

*"I feel like there's a lot of focus around grades and what grade you get because everything is graded now when it's sort of – I feel it should be more focusing on how actually it's ok to make a mistake because you learn more from that mistake. And so you feel a bit more pressurised to get a really good grade and it's quite stressful." (Year 10, Focus Group 1)*

*"It would be nicer if, instead of saying 'Oh you did this well compared to everyone else in the year' if it was 'you did this well compared to what you could have done if you'd put more effort." (Year 10, Focus Group 1)*

Some students indicated that if they perceived that their teachers did not believe in their ability they may also become demotivated:

*"Em, sometimes an intimidating one, but I think that's the way of a lot of independent schools ... they are trying to tell you that you are doing well but at the same time in this environment that you're in, there are a lot of people who tried quite hard to get in in the first place and you are competing for the top spots at the top universities. At the same time it can be really daunting if you don't have someone to be like 'You can do it', not just sort of the fact that like ... not just comparing it to other people, saying 'I'm preparing you but I'm saying you can be up there'. Rather than just sort of comparing you." (Year 10, Focus Group 1)*

There was a tension revealed by students between wanting to focus on understanding and the internal pressure they place on themselves to achieve, which was sometimes affected by the learning environment in the classroom:

*"It's harder than it sounds as well, it really is… it sounds so simple just to say, but sometimes, in the atmosphere that you're in, it can get daunting." (Year 10, Focus Group 1)*

Some students believed that they were still motivated more by the grade they wished to receive than the messages their teachers may have been trying to put across in the classroom, especially if they felt that their teachers were giving them mixed messages:

*"- … I find it can be quite confusing because some teachers can say, some say 'Oh it really doesn't matter if you didn't get the grade you wanted on this piece of homework, it's just a grade or another whatever. You can try to improve'. Whereas some say 'I expect you to get this, or higher' and they're more particular about getting a good grade so you're not sure whether to listen to the 'get a good grade' or 'don't worry, we can improve from there'. Yeah, so sometimes mixed messages.*

*- Yeah, I thought there was sometimes mixed messages about the purpose of the exams as well cos some teachers were saying 'Oh, it's just for us to know how you're doing', some were saying 'it's for you to know how you're doing'… And some were saying 'Oh, it's so you know what to do next year' and it was like 'Why am I doing them!' So, I think everyone, a little bit, they don't really listen to what the teachers say and they more just want the grade. I think everyone just thinks that truly." (Year 9 students, Focus Group 2)*

Indeed, some students commented on how they felt that they worked better at home, indicating that they may have been less likely to attempt or complete challenging work in lessons:

*"…when you're in lessons you have, like, you have a lot of distractions, I guess. You have a lot of people around you and they're all writing or doing different things to you and I think you have quite a big, like, kind of need – like it's almost like competition when you're in class because you need to like do it faster or, like, write more … But when you're at home … I guess you can do however much you feel comfortable with.*

*And it's more of a comfortable environment for me because, like, I have my own space, and, like, you can just concentrate more, I think." (Year 9, Focus Group 1)*

*"… in lessons cos you have your other school peers around you, sometimes you can be influenced by what they're doing (agreement with this). And at home, it's just your choice." (Year 9, Focus Group 2)*

*"In the lesson, you're just passive most of the time (agreement with this). When you're doing homework, even when you're distracted, the time that you actually spend doing the homework is active time." (Year 10, Focus Group 1)*

This was not, however, the case for all students. Furthermore, even if they did complete more work at home, some admitted that the quality was not necessarily as high:

*I find I put less time in homework just so that I can get it out of the way and do other things. (Year 10, Focus Group 1)*

*"Like maybe I give more time to homework because there's not so much of a set time but sometimes with homework, because you've got more time, you can get a bit distracted so sometimes I might write more but it might mean a little less. A bit less." (Year 10, Focus Group 1)*

*"- …at school, you can either mess around or you can be doing work but usually when you're messing around you can see people doing work and you're like, 'Oh, I feel bad'. And then if you know you've got something to do or you know that you've got something in soon then you're like 'Ok, I should probably go and do some work'. And also, you can go to a form room and you can go to the library whereas at home it's like-*

*- So many distractions!*

*- Food and TV and computers and obviously you're not in place where everyone's working because everyone's doing different things in your house and so there's noth-*

*ing to make you think 'Oh, I should be doing what they're doing and I should probably get on with something'." (Year 10 students, Focus Group 2)*

These findings suggest that the culture and environment for learning created by teachers within a classroom may have had a great impact on whether or not students were prepared to complete challenging tasks. It has a positive impact on some students and a demotivating or limited impact on others.

## 7.2 Results from the survey

As the participants in the focus groups were from the Whole School More Able register and therefore may perceive work to be less challenging than many of their peers, their wider year groups may have different perceptions of the factors that support or hinder their engagement with challenging work. The questionnaire was developed from the ideas that emerged from the focus groups, and given to students in Years 9, 10 and 11 in three independent girls' schools, in order to assess the extent to which the ideas expressed in the focus groups were held more widely as well as build upon the picture the focus group responses had created.

### 7.2.1 Approach to analysis of the survey

Several of the survey questions will be analysed in this section. One question is directly related to the third research question: What factors do girls in the transition between KS3 and KS4 in the selective independent sector think motivate them to engage with challenging work?

- What factors make you more likely to attempt challenging work?

The other survey questions analysed in this section explore factors which help to answer the third research question: Are there specific motivational factors or factors in the classroom environment that are associated with girls' readiness to engage with challenging work in the particular Key Stages of KS3 and KS4?

- How do test results or homework grades affect your attitudes to learning?
- How do your teachers talk about learning or schoolwork with you?

The data for each of these questions will be presented in turn. First of all, a summary table showing the number of students who responded to the question, their Likert scale responses, the mean and standard deviation will be presented. Then the results from the independent-samples t-tests, which were conducted to compare differences between Key Stages. A more detailed description of the analysis of the survey data can be found in the Methodology chapter.

### 7.2.2 Student perceptions of how their own motivation affects their attempts at challenging work

The students were asked to indicate on a five-point Likert scale how far they agreed with the factors the focus group participants had identified as those which would encourage them to attempt challenging work (**Table 7.1**).

# Table 7.1 Factors encouraging attempts at challenging work

| Q. What factors make you more likely to attempt challenging work? | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. | No response | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev. |
| I am more likely to complete a challenging task if you know that it's going to contribute to help me in an exam | KS3 | 60 | 3 | 0 | 4 | 7 | 35 | 14 | 3.98 | .79 |
| | KS4 | 125 | 4 | 0 | 1 | 12 | 71 | 41 | 4.17 | .62 |
| TOTAL | | 192 | 7 (4%) | 0 | 5 (3%) | 19 (10%) | 106 (55%) | 55 (29%) | 4.14 | .62 |
| I am more likely to complete a challenging task if I will get a grade for it | KS3 | 60 | 3 | 1 | 6 | 11 | 29 | 13 | 3.78 | .96 |
| | KS4 | 125 | 4 | 0 | 10 | 26 | 59 | 30 | 3.85 | .71 |
| TOTAL | | 192 | 7 (4%) | 1 (1%) | 16 (8%) | 37 (19%) | 88 (46%) | 43 (22%) | 3.84 | .90 |
| I am more likely to complete a challenging task if I am interested in it | KS3 | 60 | 3 | 0 | 0 | 6 | 26 | 28 | 4.37 | .66 |
| | KS4 | 125 | 4 | 0 | 0 | 11 | 52 | 62 | 4.37 | .58 |
| TOTAL | | 192 | 7 (4%) | 0 | 0 | 17 (9%) | 78 (41%) | 90 (47%) | 4.39 | .65 |
| I am more likely to complete a challenging task if my teacher's given us a lot of background to the subject | KS3 | 60 | 3 | 0 | 6 | 12 | 39 | 3 | 3.65 | .73 |
| | KS4 | 125 | 4 | 0 | 7 | 31 | 61 | 26 | 3.78 | .74 |
| TOTAL | | 192 | 7 (4%) | 0 | 13 (7%) | 43 (22%) | 100 (52%) | 29 (15%) | 3.78 | .79 |
| I find it really satisfying when you finish a challenging task | KS3 | 60 | 3 | 1 | 2 | 13 | 25 | 19 | 3.98 | .91 |
| | KS4 | 125 | 4 | 1 | 8 | 25 | 52 | 39 | 3.92 | .89 |
| TOTAL | | 192 | 7 (4%) | 2 (1%) | 10 (5%) | 38 (20%) | 77 (40%) | 58 (30%) | 3.97 | .91 |
| I am competitive so I complete challenging tasks so that I can be better than other people or stay the same standard as other people | KS3 | 60 | 3 | 3 | 20 | 20 | 11 | 6 | 2.95 | 1.06 |
| | KS4 | 125 | 4 | 12 | 33 | 42 | 25 | 13 | 2.93 | 1.04 |
| TOTAL | | 192 | 7 (4%) | 15 (8%) | 53 (28%) | 62 (32%) | 36 (19%) | 19 (10%) | 2.95 | 1.11 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| I will attempt challenging tasks as I don't like letting myself down | KS3 | 60 | 3 | 0 | 9 | 23 | 23 | 5 | 3.40 | .85 |
| | KS4 | 125 | 4 | 0 | 38 | 46 | 28 | 13 | 3.08 | .93 |
| TOTAL | | 192 | 7 (4%) | 0 | 47 (25%) | 69 (36%) | 51 (27%) | 18 (9%) | 3.22 | .94 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| I am more likely to attempt a challenging task if someone says that I can get a good grade as it boosts my self-esteem | KS3 | 60 | 3 | 0 | 4 | 21 | 24 | 11 | 3.70 | .85 |
| | KS4 | 125 | 4 | 0 | 12 | 30 | 66 | 17 | 3.67 | .75 |
| TOTAL | | 192 | 7 (4%) | 0 | 16 (8%) | 51 (27%) | 90 (47%) | 28 (15%) | 3.70 | .83 |
| I do not like challenging work because I'm afraid that I won't be able to do it well | KS3 | 60 | 3 | 6 | 20 | 17 | 12 | 5 | 2.83 | 1.12 |
| | KS4 | 125 | 4 | 8 | 44 | 37 | 23 | 13 | 2.95 | 1.08 |
| TOTAL | | 192 | 7 (4%) | 14 (7%) | 64 (33%) | 54 (28%) | 35 (18%) | 18 (9%) | 2.89 | 1.11 |

Of the nine sub-questions in this section, three sub-questions could be considered to have a link to intrinsic motivation as they indicate interest in doing the task for the task's sake. These sub-questions are: 'I am more likely to complete a challenging task if I am interested in it'; 'I am more likely to complete a challenging task if my teacher's given us a lot of background to the subject'; and 'I find it really satisfying when you finish a challenging task'.

Of all the factors likely to encourage students to attempt challenging work, the statement 'I am more likely to complete a challenging task if I am interested in it' received highest agreement ($\underline{M}$ = 4.39), but strong agreement was also seen for the statements 'I find it really satisfying when you finish a challenging task' ($\underline{M}$ = 3.97) and 'I am more likely to complete a challenging task if my teacher's given us a lot of background to the subject' ($\underline{M}$ = 3.78).

Independent-samples t-tests were conducted to compare Key Stages with regards to student perceptions of these three factors. No statistically significant differences were found, which indicates that there were no specific contextual

factors that were associated with engaging with challenging work in the particular Key Stages.

Two other statements in this section could also be seen to have links to intrinsic motivation, although they can also be extrinsically motivated: ‘I am competitive so I complete challenging tasks so that I can be better than other people or stay the same standard as other people’ ($\underline{M}$ = 2.95) and ‘I will attempt challenging tasks as I don’t like letting myself down’ ($\underline{M}$ = 3.22) (**Table 7.1**). Independent-samples t-tests were conducted to compare student perceptions of these two factors by Key Stage and no statistically significant differences were found.

Several other factors that encouraged completion of extension work were provided by students (**Table 7.2**). The first statement is similar to a couple of the survey statements: ‘I am more likely to complete a challenging task if you know that it’s going to contribute to help me in an exam’ and ‘I am more likely to complete a challenging task if my teacher’s given us a lot of background to the subject’. However the student’s phrasing of ‘[it] is relevant to help us with our topic and it's not just a task to keep us occupied’ implies a stronger sense of the perceived importance of the task itself for student learning. The second statement also conveys the importance of the value placed upon a subject by the student, which did not appear as an explicit statement in the survey. Finally, the third statement bears a similarity to the survey statement ‘I do not like challenging work because I’m afraid that I won’t be able to do it well’ but conveys a greater sense of the importance of the classroom climate in determining whether or not a student perceives pressure to complete a task correctly.

## Table 7.2 Other factors encouraging attempts at challenging work

| **Q. What factors make you more likely to attempt challenging work?** | |
|---|---|
| KS3 | I will be more likely to attempt challenging work if I know that we have at least done some notes on it class and is relevant to help us with our topic and it's not just a task to keep us occupied |
| KS3 | It varies subject to subject, if I like that subject and it is important to me I will try harder than I would in something I did not enjoy as much. |
| KS3 | I will not complete challenging task if I feel to pressured to get it right (if it is optional). |

### 7.2.3 Student perceptions of the impact of test results and homework on their attitudes towards challenging work

Three of the sub-questions in **Table 7.1** linked motivation for completing challenging work with the achievement structure provided by grades. These sub-questions are: 'I am more likely to complete a challenging task if you know that it's going to contribute to help me in an exam'; 'I am more likely to complete a challenging task if I will get a grade for it'; and 'I am more likely to attempt a challenging task if someone says that I can get a good grade as it boosts my self-esteem'.

**Table 7.1** shows that of these three statements, strongest agreement was seen for the statement 'I am more likely to complete a challenging task if you know that it's going to contribute to help me in an exam' ($\underline{M}$ = 4.14), but agreement was also strong for the other two statements: 'I am more likely to complete a challenging task if I will get a grade for it' ($\underline{M}$ = 3.84); and 'I am more likely to

attempt a challenging task if someone says that I can get a good grade as it boosts my self-esteem' (M = 3.70).

Independent-samples t-tests were conducted to compare student perceptions of these three factors by Key Stage and no statistically significant differences were found. This again indicates that there were no specific contextual factors that were associated with engaging with challenging work in the particular Key Stages.

As the level of agreement with these statements was similar to the statements linked to intrinsic motivation in Section 7.2.2, it indicates that the students held both intrinsic and extrinsic motivations in KS3 and KS4 with no statistically significant differences between the Key Stages.

The students were also asked whether they perceived that test results or homework grades affected their learning (**Table 7.3**). This question was asked to explore factors relevant to the third research question: Are there specific motivational factors or factors in the classroom environment that are associated with girls' readiness to engage with challenging work in the particular Key Stages of KS3 and KS4? In particular, whether students held extrinsic or intrinsic motivation, as this could help to explain the extent to which they were willing to undertake challenging work.

There was strong agreement for all of the statements related to this question apart from the statement 'I don't mind if I don't achieve highly in a subject that I don't enjoy' (M = 2.62). This indicates that the students felt that the marks they achieved in each of their subjects was important, even if they did not enjoy a particular subject. The importance of individual achievement could also be seen in the strong agreement with the statement 'I am disappointed when I get a low mark or grade' (M = 4.37). This statement received the strongest agreement

of each of the statements in this question, highlighting the importance of achievement for the students.

The response to the statements ‘If I get a low grade or mark I feel that it is my responsibility to improve my performance’ (M = 4.05) and ‘If I get a low grade or mark I think that my teacher should do more to help me to improve’ (M = 3.69) shows that there was strong agreement for the idea that both the students themselves and their teachers were responsible for improving student achievement. However, as there was stronger agreement for the statement relating to student responsibility over teacher responsibility, this indicates that they perceive the importance of their own effort over that of their teachers. The importance of student responsibility for improving their academic performance can also be seen in the strong support for the statement ‘If I get a low grade or mark I feel motivated to improve my performance’ (M = 4.05). The students’ strong agreement for the statement ‘I revise harder for tests that go towards a report sent home to my parents’ (M = 3.45) indicated that they also increased the level of their effort when they knew that their performance would be reported back to their parents.

The strong agreement with the statement ‘I only enjoy learning a subject when I feel that I am achieving high marks or grades’ (M = 3.61) indicates that the students perceived a link between achievement and enjoyment of learning a subject.

There was slightly stronger agreement for the statement ‘I like to know what mark or grade other people in the class get’ (M = 3.61) than for the statement ‘I don’t mind other people in the class knowing what mark or grade I get for my work’ (M = 3.16). This indicates that the students like to know how their performance compares to other students but that they are less keen on the other students knowing what this relative position is.

Finally, slightly lower agreement was shown for the statement ‘I think it is more important to learn from my mistakes than to get a high grade or mark’ ($\underline{M}$ = 3.16). This statement is more directly linked to intrinsic motivation than extrinsic motivation as it contains the idea that learning from one’s mistakes is more important than the performance in a piece of homework or a test. The results for this question therefore indicated that the students held slightly stronger extrinsic motivations than intrinsic motivations.

## Table 7.3 Student perceptions of the impact of test results and homework grades

| Q. How do test results or homework grades affect your attitudes to learning? | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. | No response | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev |
| I think it is more important to learn from my mistakes than to get a high grade or mark | KS3 | 60 | 3 | 1 | 13 | 23 | 19 | 4 | 3.20 | .92 |
| | KS4 | 125 | 4 | 5 | 25 | 45 | 48 | 2 | 3.14 | .89 |
| TOTAL | | 192 | 7 (4%) | 6 (3%) | 38 (20%) | 68 (35%) | 67 (35%) | 6 (3%) | 3.16 | .90 |
| I revise harder for tests that go towards a report sent home to my parents | KS3 | 60 | 3 | 1 | 8 | 16 | 26 | 9 | 3.57 | .96 |
| | KS4 | 125 | 4 | 6 | 20 | 36 | 44 | 19 | 3.40 | 1.08 |
| TOTAL | | 192 | 7 (4%) | 7 (4%) | 28 (15%) | 52 (27%) | 70 (37%) | 28 (15%) | 3.45 | 1.04 |
| I am disappointed when I get a low mark or grade | KS3 | 60 | 3 | 0 | 1 | 2 | 33 | 24 | 4.33 | .63 |
| | KS4 | 125 | 4 | 2 | 1 | 8 | 50 | 64 | 4.38 | 1.08 |
| TOTAL | | 192 | 7 (4%) | 2 (1%) | 2 (1%) | 10 (5%) | 83 (43%) | 88 (46%) | 4.37 | .73 |
| I like to know what mark or grade other people in the class get | KS3 | 60 | 3 | 2 | 2 | 16 | 30 | 10 | 3.73 | .90 |
| | KS4 | 125 | 4 | 5 | 11 | 34 | 60 | 15 | 3.55 | .95 |
| TOTAL | | 192 | 7 (4%) | 7 (4%) | 13 (7%) | 50 (26%) | 90 (47%) | 25 (13%) | 3.61 | .94 |
| I don't mind other people in the class knowing what mark or grade I get for my work | KS3 | 60 | 3 | 7 | 8 | 21 | 21 | 3 | 3.08 | 1.08 |
| | KS4 | 125 | 4 | 7 | 20 | 43 | 51 | 4 | 3.20 | .94 |
| TOTAL | | 192 | 7 (4%) | 14 (7%) | 28 (15%) | 64 (33%) | 72 (38%) | 7 (4%) | 3.16 | .99 |

| Q. How do test results or homework grades affect your attitudes to learning? | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. | No response | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev |
| If I get a low grade or mark I feel that it is my responsi-bility to improve my performance | KS3 | 60 | 3 | 1 | 2 | 7 | 32 | 18 | 4.07 | .95 |
| | KS4 | 125 | 4 | 0 | 1 | 17 | 83 | 24 | 4.04 | .60 |
| TOTAL | | 192 | 7 (4%) | 1 (1%) | 3 (2%) | 24 (13%) | 115 (60%) | 42 (22%) | 4.05 | .69 |
| If I get a low grade or mark I feel motivated to improve my performance | KS3 | 60 | 3 | 2 | 4 | 16 | 28 | 10 | 3.67 | .95 |
| | KS4 | 125 | 4 | 7 | 11 | 37 | 50 | 20 | 3.52 | 1.04 |
| TOTAL | | 192 | 7 (4%) | 9 (5%) | 15 (8%) | 53 (28%) | 78 (41%) | 30 (16%) | 3.57 | 1.02 |
| If I get a low grade or mark I think that my teacher should do more to help me to improve | KS3 | 60 | 3 | 1 | 6 | 17 | 25 | 11 | 3.65 | .95 |
| | KS4 | 125 | 4 | 0 | 14 | 34 | 51 | 26 | 3.71 | .92 |
| TOTAL | | 192 | 7 (4%) | 1 (1%) | 20 (10%) | 51 (27%) | 76 (40%) | 37 (19%) | 3.69 | .93 |
| I only enjoy learning a subject when I feel that I am achieving high marks or grades | KS3 | 60 | 3 | 2 | 10 | 13 | 24 | 11 | 3.53 | 1.08 |
| | KS4 | 125 | 4 | 0 | 24 | 25 | 48 | 28 | 3.64 | 1.04 |
| TOTAL | | 192 | 7 (4%) | 2 (1%) | 34 (18%) | 38 (20%) | 72 (38%) | 39 (20%) | 3.61 | 1.05 |
| I don't mind if I don't achieve highly in a subject that I don't enjoy | KS3 | 60 | 3 | 5 | 16 | 20 | 15 | 4 | 2.95 | 1.06 |
| | KS4 | 125 | 4 | 26 | 44 | 31 | 19 | 5 | 2.46 | 1.10 |
| TOTAL | | 192 | 7 (4%) | 31 (16%) | 60 (31%) | 51 (27%) | 34 (18%) | 9 (5%) | 2.62 | 1.11 |

Independent-samples t-tests were conducted to compare Key Stages with regard to student perceptions of these factors. There was a statistically significant difference at the $p < .05$ level for one of the statements: 'I don't mind if I don't achieve highly in a subject that I don't enjoy' (**Table 7.4**). For this statement, KS3 students indicated that they did not mind as much as KS4 students if they did not achieve highly in a subject they did not enjoy, although the effect size remained small.

## Table 7.4 Comparison of student perceptions of the impact of test results and homework grades

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| I don't mind if I don't achieve highly in a subject that I don't enjoy | KS3 | 60 | 3 | 2.75 | 1.06 | t = 2.84 (183), p = .01 eta = 0.04 |
| | KS4 | 125 | 4 | 2.46 | 1.10 | |

Several other comments about how the students perceived the impact of test results and homework grades on their learning were given (**Table 7.5**). Two of these statements conveyed the importance of the teacher role in helping the student to improve. One, 'I feel that if I get a low mark that a teacher shouldn't give it back and say that I didn't do very well but actually give me some feedback to help me understand why, where and how I got those things wrong', conveys the perceived importance of teacher feedback to help the student know how to improve. The other, 'If I get a low grade and haven't revised I think the responsibility falls to me; however if many students also get low grades I think the teacher needs to have more of an input', shows the perceived need for the teacher to work with the student on improving the student's academic performance. Another student commented on how they perceived the teacher's knowledge of the student as being important in the teacher accurately convey-

ing the improvement the student had made. Finally, one student commented on how homework grades were not as important as test results.

## Table 7.5 Other perceptions of the impact of test results and homework grades

| | |
|---|---|
| KS3 | I feel that if I get a low mark that a teacher shouldn't give it back and say that I didn't do very well but actually give me some feedback to help me understand why, where and how I got those things wrong |
| KS3 | I am more concerned with my test results than my homework grades |
| KS4 | Sometimes it is frustrating in a subject you really enjoy if affected by getting a new teacher that doesn't know you as we'll as your previous teacher as it means that towards your parents it looks like you are getting worse at a subject |
| KS4 | If I get a low grade and haven't revised I think the responsibility falls to me; however if many students also get low grades I think the teacher needs to have more of an input |

### 7.2.4 Student perceptions of teacher talk and how this may affect their attitudes towards challenging work

**Section 7.2.3** showed that there was strong agreement with the statement 'I am more likely to complete a challenging task if my teacher's given us a lot of background to the subject'. The student survey contained statements to be ranked on the Likert scale to further develop this idea by exploring the language the students perceived their teachers used in the classroom (**Table 7.6).**

This was to gain insight into student perceptions of the classroom culture created by teachers.

There was strongest agreement with the statement ‘My teachers encourage us to compare our own performance with what we could have done’ (M = 3.48), followed by ‘My teachers do not usually say that work is hard’ (M = 3.29) and ‘My teachers try to put us outside our comfort zone’ (M = 3.27). Moderate agreement was shown for the statements ‘My teachers encourage us to do our own research outside of what we’re already doing in class’ (M = 3.01), whilst ‘My teachers regularly link our work to real life situations’ (M = 2.86) and ‘My teachers do not say they expect us to get certain grades’ (M = 2.86) received least agreement.

Independent-samples t-tests were conducted to compare student perceptions of these three factors by Key Stage and no statistically significant differences were found.

Stronger agreement was indicated for the statements that implied teacher talk with a focus on grades, displayed in **Table 7.7**.

There was strongest agreement with the statement ‘My teachers are always bringing up GCSEs and tests or Summer exams’ (M = 3.90), followed by ‘I feel like there’s a lot of focus around grades’ (M = 3.67) and ‘I feel as if my teachers are just getting through the syllabus’ (M = 3.20). Less agreement was held with the statement ‘My teachers often compare our individual performance with the rest of the year group’ (M = 2.93).

# Table 7.6 Student Perceptions of Teacher Talk: growth mind-set

| Q. How do your teachers talk about learning or schoolwork with you? | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. | No response | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev. |
| My teachers encourage us to do our own research outside of what we're already doing in class | KS3 | 61 | 2 | 1 | 16 | 27 | 17 | 0 | 2.98 | .79 |
| | KS4 | 129 | 0 | 1 | 40 | 46 | 39 | 3 | 3.05 | .84 |
| TOTAL | | 192 | 2 (1%) | 2 (1%) | 56 (29%) | 73 (38%) | 56 (29%) | 3 (2%) | 3.01 | .84 |
| My teachers try to put us outside our comfort zone | KS3 | 61 | 2 | 1 | 10 | 25 | 25 | 0 | 3.21 | .78 |
| | KS4 | 129 | 0 | 1 | 20 | 52 | 51 | 5 | 3.27 | .86 |
| TOTAL | | 192 | 2 (1%) | 2 (1%) | 30 (16%) | 77 (40%) | 76 (40%) | 5 (3%) | 3.27 | .80 |
| My teachers regularly link our work to real life situations | KS3 | 61 | 2 | 1 | 19 | 26 | 15 | 0 | 2.90 | .79 |
| | KS4 | 129 | 0 | 8 | 44 | 41 | 32 | 4 | 2.89 | .98 |
| TOTAL | | 192 | 2 (1%) | 9 (5%) | 63 (33%) | 67 (35%) | 47 (25%) | 4 (2%) | 2.86 | .92 |
| My teachers do not say they expect us to get certain grades | KS3 | 61 | 2 | 6 | 11 | 25 | 15 | 4 | 3.00 | 1.05 |
| | KS4 | 129 | 0 | 9 | 41 | 51 | 23 | 5 | 2.95 | .93 |
| TOTAL | | 192 | 2 (1%) | 15 (8%) | 52 (27%) | 76 (40%) | 38 (20%) | 9 (5%) | 2.86 | .98 |
| My teachers encourage us to compare our own performance with what we could have done | KS3 | 61 | 2 | 1 | 8 | 14 | 36 | 2 | 3.49 | .83 |
| | KS4 | 129 | 0 | 1 | 14 | 45 | 60 | 9 | 3.47 | .78 |
| TOTAL | | 192 | 2 (1%) | 2 (1%) | 22 (12%) | 59 (31%) | 96 (50%) | 11 (6%) | 3.48 | .82 |
| My teachers do not usually say that work is hard | KS3 | 61 | 2 | 0 | 5 | 28 | 23 | 5 | 3.46 | .77 |
| | KS4 | 129 | 0 | 0 | 31 | 51 | 36 | 11 | 3.17 | .92 |
| TOTAL | | 192 | 2 (1%) | 0 | 36 (19%) | 79 (41%) | 59 (31%) | 16 (8%) | 3.29 | .87 |

## Table 7.7 Student Perceptions of Teacher Talk: grade focused

| Q. How do your teachers talk about learning or schoolwork with you? | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Key Stage | No. | No response | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev. |
| My teachers are always bringing up GCSEs and tests or Summer exams | KS3 | 61 | 2 | 0 | 9 | 16 | 25 | 11 | 3.62 | .95 |
| | KS4 | 129 | 0 | 2 | 8 | 19 | 55 | 45 | 4.03 | .94 |
| TOTAL | | 192 | 2 (1%) | 2 (1%) | 17 (9%) | 35 (18%) | 80 (42%) | 56 (29%) | 3.90 | .96 |
| I feel as if my teachers are just getting through the syllabus | KS3 | 61 | 2 | 3 | 18 | 22 | 15 | 3 | 2.95 | .97 |
| | KS4 | 129 | 0 | 1 | 25 | 44 | 50 | 9 | 3.32 | .89 |
| TOTAL | | 192 | 2 (1%) | 4 (2%) | 43 (22%) | 66 (34%) | 65 (34%) | 12 (6%) | 3.20 | .93 |
| I feel like there's a lot of focus around grades | KS3 | 61 | 2 | 1 | 11 | 20 | 21 | 8 | 3.39 | .99 |
| | KS4 | 129 | 0 | 1 | 13 | 27 | 57 | 31 | 3.81 | .94 |
| TOTAL | | 192 | 2 (1%) | 2 (1%) | 24 (25%) | 47 (25%) | 78 (41%) | 39 (20%) | 3.67 | .98 |
| My teachers often compare our individual performance with the rest of the year group | KS3 | 61 | 2 | 2 | 28 | 17 | 9 | 5 | 2.79 | 1.02 |
| | KS4 | 129 | 0 | 8 | 39 | 38 | 33 | 11 | 3.00 | 1.08 |
| TOTAL | | 192 | 2 (1%) | 10 (5%) | 67 (35%) | 55 (29%) | 42 (22%) | 16 (8%) | 2.93 | 1.06 |
| I just focus on the grade that I want to achieve | KS3 | 61 | 2 | 0 | 9 | 14 | 31 | 7 | 3.59 | .88 |
| | KS4 | 129 | 0 | 2 | 14 | 31 | 59 | 23 | 3.67 | .95 |
| TOTAL | | 192 | 2 (1%) | 2 (1%) | 23 (12%) | 45 (23%) | 90 (47%) | 30 (16%) | 3.65 | .92 |

Independent-samples t-tests were conducted to compare Key Stages with regard to student perceptions of these factors. There was a statistically significant difference at the $p < .05$ level for three of the statements: 'My teachers are always bringing up GCSEs and tests or Summer exams', 'I feel as if my teachers are just getting through the syllabus' and 'I feel like there's a lot of focus around grades' (**Table 7.8**). Each indicated that KS4 students were more likely to per-

ceive a focus on grades or syllabus completion by their teachers, although the effect size remained small.

## Table 7.8 Comparison of student Perceptions of Teacher Talk: grade focused

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| My teachers are always bringing up GCSEs and tests or Summer exams | KS3 | 61 | 2 | 3.62 | .95 | t = -2.78 (188), p = .01 eta = .04 |
| | KS4 | 129 | 0 | 4.03 | .94 | |
| I feel as if my teachers are just getting through the syllabus | KS3 | 61 | 2 | 2.95 | .97 | t = -2.57 (188), p = .01 eta = .03 |
| | KS4 | 129 | 0 | 3.32 | .89 | |
| I feel like there's a lot of focus around grades | KS3 | 61 | 2 | 3.39 | .99 | t = -2.77 (188), p = .01 eta = .04 |
| | KS4 | 129 | 0 | 3.81 | .94 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

The emphasis on syllabus completion and final examinations or grades, which the focus groups had indicated led to less teacher passion and consequently made students less likely to engage with challenging work (**Section 7.6**), is therefore evident in the perception of the surveyed students.

However, the fact that the final statement in **Table 7.5** received fairly strong agreement, 'I just focus on the grade that I want to achieve' (M = 3.65), indicates that the surveyed students perceived teacher talk as less important than their own motivation to achieve. No statistically significant differences were found for this statement when independent-samples t-tests were conducted to compare student perceptions by Key Stage.

Several other comments were offered about teacher talk (**Table 7.9**). Many of these statements revealed that some students perceived a variation between their teachers in how they spoke about learning or schoolwork. Other statements showed that some students felt that they were not affected by how their teachers acted.

### Table 7.9 Other student Perceptions of Teacher Talk

| Q. How do your teachers talk about learning or schoolwork with you? | |
|---|---|
| KS3 | Only some teachers are just trying to get through the syllabus. |
| KS3 | I find that it varies with each teacher. |
| KS3 | I like being compared to other students as it gives me a grade to aim for that is relevant |
| KS3 | I try to understand but I believe teachers just focus on us getting good grades then explaining things in depth to us |
| KS3 | It is very different with different teachers, some are better than others |
| KS3 | My teachers suggest looking at other resources if we would like to learn more about a certain topic |
| KS4 | Some teachers are more exam-focused than others. So you can get mixed messages |
| KS4 | I focus more on the knowledge and skills I gain from studying |

## 7.3 The relationship between the focus groups and the survey

The focus group students indicated that they set themselves personal challenges so that they could be of their best and that they were more likely to engage in challenging work if they were interested, had the time and felt that they were

doing well. Summative assessments, competition within the classroom and inspiring and motivated teachers also provided some motivation. The learning environment within the classroom had a limited impact on some students' motivation to engage with challenging work and a more positive impact on others.

The student surveys confirmed that girls held many of the perceptions of the focus group students more widely in the selective independent sector. There was strong agreement with the sense that students were motivated to engage with challenging tasks to improve themselves, and that this was held simultaneously with the motivation provided by grades and summative assessment. Less agreement was seen for the idea of competition within the classroom providing motivation. There was good agreement with the perception that their teachers used positive language to describe their learning but the perception that their teachers were grade-focused was stronger amongst the surveyed students than amongst the focus groups. However, there was still a strong indication that the surveyed students just focused on the grades that they wanted to achieve.

## Summary

This chapter has shown that the students perceived a range of factors that played a role in determining whether or not they engaged in challenging work. Students revealed that they were motivated to engage with challenging tasks to improve themselves and for the purposes of doing well in summative assessments. The perception of teacher language was mixed but there was a stronger indication that the students just focused on the grades that they wanted to achieve.

Any statistically significant differences between Key Stages were small, indicating that there were no contextual or motivation factors associated with the readiness to engage with challenging work specific to the particular Key Stages of KS3 or KS4.

The next chapter discusses the implications of the findings from the focus groups and student survey, framing this discussion with the background literature set out in Chapters 2 and 3. The conclusions of the study, how it has contributed to knowledge, its limitations and suggested areas for future research are also presented.

# Chapter 8: Discussion and Interpretation

The purpose of my research was to gather the perceptions of challenging work held by girls in the transition between KS3 and KS4 in the selective independent sector and to explore the factors in the classroom environment that contributed to student willingness to engage with challenging work.

In this chapter, I will draw together the findings presented in Chapters 5, 6 and 7, showing how they link to, and build upon, the literature and theories presented in Chapters 2 and 3.

The discussion will be arranged under the research questions that directed my data collection:

1. What do girls in the transition between KS3 and KS4 in the selective independent sector perceive as challenging work and is this linked to theories of deep learning?

2. How do girls in the transition between KS3 and KS4 in the selective independent sector feel about the level of challenge in their current work?

3. Are there specific motivational factors or factors in the classroom environment that are associated with girls' readiness to engage with challenging work in the particular Key Stages of KS3 and KS4?

The chapter concludes with a consideration of the implications for the classroom that can be taken from this study, how it has contributed to knowledge, its limitations and suggestions for future research.

## 8.1 Research Question 1: What do girls in the transition between KS3 and KS4 in the selective independent sector perceive as challenging work and is this linked to theories of deep learning?

The study showed that the girls felt challenging work involved learning actively through having to think and using your brain, and that it involved applying knowledge outside the classroom boundary. The girls reported that challenging work involved tasks that went beyond the ordinary by stretching students to find new ways of tackling problems and encouraged them to use different techniques from normal. Challenging work could involve students being responsible for organizing the learning process or having to rely on others during group work. Challenging work was also seen to take perseverance in order to succeed.

Tasks identified by the students as challenging included essay writing; research homework; tasks in timed conditions; group tasks that rely on others' knowledge; planning and carrying out scientific experiments; tasks that required application of knowledge; and extension questions.

Two themes emerged in answer to this research question, which will now be discussed:

- Girls offer rich definitions of challenging work that correspond to theories of deep learning;
- Challenge is individually defined but views of challenging work remain stable from Key Stage 3 into Key Stage 4.

### 8.1.1 Girls offer rich definitions of challenging work that correspond to theories of deep learning

Many of the definitions of challenging work that emerged from the focus groups were very similar to the definitions of challenging work and of deep learning outlined in Chapters 2 and 3.

The student claims that challenging work involved learning actively through having to think, using your brain, and by exploring new methods of finding answers, and that it involves applying knowledge outside the classroom boundary

such as in the development of skills or to new situations, bear resemblance to some of the higher levels of thinking described in Bloom's taxonomy: to analyse, evaluate and create (Bloom et al. 1956; Anderson and Krathwohl et al. 2001).

The claim that challenging work involved tasks that went beyond the ordinary by stretching students to find new ways of tackling problems and encouraging them to use different techniques from normal, echoes Vygotsky's (1978) idea of zone of proximal development (ZPD), where the learner is moved from what they can do with the help of the teacher into applying their knowledge and skills independently.

The idea that challenging work could involve students being responsible for organizing the learning process or having to rely on others during group work is similar to ideas of autonomy and student authority within the TARGET model (Clinkenbeard 2012), as the girls identified challenge in the task of deciding what information is relevant and accurate and of how to present it.

Underpinning each of these suggestions was the idea that challenging work takes perseverance in order to succeed. This shows that the girls were able to portray challenging work in a way that resonates with Marton and Säljö's (1976) concept of deep learning, with a strong sense of how challenging work involved learning independently and actively to understand material.

The fact the focus group students were able to offer such rich descriptions of challenging work indicates that the students have had experience of these ideas about challenging work in their learning at some point or that the language of deep learning is being used in their classrooms. It may be that a school based culture of promoting ideas related to deep learning and mastery orientations to learning had influenced the participants in the focus groups. This would perhaps indicate Rogers' (2013) recommendation of interventions to encourage students towards a deep approach to learning is taking place in these schools, at least to an extent.

### 8.1.2 Challenge is individually defined but views of challenging work remain stable from Key Stage 3 into Key Stage 4

The data also conveyed the sense that what was challenging meant different things to different students. The focus groups had indicated that the perception of the difficulty of work was related to student perceptions of their ability to achieve in a particular subject. In terms of the survey, there were a range of responses on the five-point Likert scale for the statements about what the term challenging work meant, what challenging work looked like in the classroom, and even how challenged they felt by their current work in each subject. This indicates that not every student had the same perception of work difficulty.

However, the fact that there were no statistically significant differences between the results of the two Key Stages for the survey questions that defined and described challenging work would suggest that views of challenging work may remain fairly stable as students progress from one Key Stage to the next. This might be linked to what students perceive as being a 'regular' level of activity. If students in a school are regularly set tasks that are more difficult than in another school, and are given the necessary support in order to develop the skills to feel able to complete that task, then the level of difficulty that those students perceive within tasks will be set at a higher benchmark than students who are regularly set tasks at a lower level. Furthermore, if there were broadly similar perceptions of the difficulty of work as student progressed from Key Stage 3 into Key Stage 4, it would be feasible for schools to identify and subsequently work to change the perception of students towards the level of challenge within their work.

## 8.2 Research Question 2: How do girls in the transition between KS3 and KS4 in the selective independent sector feel about the level of challenge in their current work?

The study showed that the girls did not feel overly challenged by their current work. However, although the focus group students believed that their work could be more challenging, the surveyed students did not want their work to be

more difficult. The surveyed students also reported a low frequency of completion of the type of extension tasks suggested by the focus groups in addition to showing a preference for easier work.

The fact that the survey respondents did not appear to be open to the option of completing more challenging work and reported a low completion of extension tasks was in contrast to the rich descriptions of challenging work that the students had shown agreement with. As extension tasks are generally activities that would offer additional challenge for students, this would suggest that the students were not choosing to do more challenging work when they were given the option.

Amongst the survey respondents, there was stronger agreement with the idea that they would like their work to be easier rather than more challenging. The reasons that met with the strongest agreement were the idea that the difficulty of work led to stress; the idea that easier work can help you to get better before pushing yourself further; and that some of the work was irrelevant. The latter reason, in particular, has strong links to Expectancy-Value Theory (Pintrich and Schunk 2002) in the sense that a lack of perceived value in challenging tasks meant they did not have the desire to complete them.

Additionally, the remark by a Year 10 focus group participant that she preferred the difficulty of work to be moderate 'because you're comfortably understanding' and will therefore be able to do the examinations better, may help to explain why there was a slight preference for less challenging work amongst the surveyed students. At the heart of the suggestion that moderate work leads to 'comfortable' understanding is the implication that challenging work can be uncomfortable and that not all students enjoyed this feeling. This goes beyond Expectancy-Value Theory (Pintrich and Schunk 2002) as an explanation for why the students did not want to do more challenging work. Some students wanted to progress in their learning and the difficulty of the work they completed at a slower pace than they perceived the tasks created by their teachers required them to do. The pace with which students perceive they are being re-

quired to work has links to Vygotky's (1978) idea of ZPD, where teachers scaffold the work so that the students are gradually guided into the area between what they know they can do and learning or activities that are new to them. The acknowledgment that the pace of learning was perceived to be too fast for some students is a reminder to teachers of the importance of assessing student perceptions of challenge within their work so that they are able to scaffold activities in a way that they feel 'comfortable' with more challenging work and are thereby more likely to complete it.

## 8.3 Research Question 3: Are there specific motivational factors or factors in the classroom environment that are associated with girls' readiness to engage with challenging work in the particular Key Stages of KS3 and KS4?

Despite showing a preference for 'comfortable' work, the students indicated several factors that would encourage them to engage with challenging work. Student interest in the task received the strongest agreement, followed by the idea that completing a challenging task could be satisfying. Students also reported that they would be more likely to complete a challenging task if a teacher had given a lot of background to the task, or if a student had been told that they were likely to get a high grade if they completed the task. These student-identified factors suggest that teachers can play an important role in encouraging students to engage with more challenging work.

There was also a strong indication that student perception of the factors that motivated them to engage with challenging work hold resonance with our current understanding of achievement-goal theory and expectancy-value theory. Students being interested in the task and the role of teachers giving background to the task have strong links with expectancy-value theory (Pintrich and Schunk 2002). The idea that completing a challenging task could be satisfying bears resemblance to a mastery-approach goal. Finally, the knowledge that they were likely to get a high grade if they completed the task is similar to a performance-approach goal. Therefore, students hold a variety of goal approaches, and these play a role in motivating them to engage with challenging work.

By contrast, relatively low agreement was shown for the idea that students did not like challenging work because they were afraid that they would not be able to do it well. This might indicate that the students did not hold performance-avoid goals as strongly as mastery-approach or performance-approach goals. It may, however, be that many students did not wish to be seen to agree with this statement as it could be seen to reflect negatively upon them.

Although the differences between the Key Stages were small, two factors linked to the classroom environment and motivational factors emerged most strongly from the data, which will be discussed in turn:

- GCSEs provide a key contextual factor in determining student readiness to engage with challenging work;
- Girls hold 'performance-approach-style' mastery goals.

Both of these factors could be seen to develop a richer understanding of both achievement-goal theory and expectancy-value theory as they apply to girls in the transition between KS3 and KS4 in the selective independent sector.

### 8.3.1 GCSEs provide a key contextual factor in determining student readiness to engage with challenging work

There was an indication that GCSEs provided a key contextual factor in promoting a limited readiness to engage with challenging work. For example, KS4 students indicated a stronger preference for easier work than KS3 students; and KS4 students were also less likely to complete extension tasks than KS3 students, although the differences between the Key Stages were small. The survey also showed that students in KS3 enjoyed their current work slightly more than students in KS4. The factor of GCSEs can be linked to the classroom environment as students are prepared for the GCSE examinations in their classrooms.

When asked specifically about their feelings towards GCSEs, there appeared to be a high level of worry or concern amongst many students. KS3 students, for

example, indicated that they had concerns about the increased levels of challenge in work when they started their GCSE courses in Year 10. KS4 students strongly indicated that they had chosen GCSE subjects based on how well they had performed in that subject as well as expressing more concern about subjects they felt they were not currently doing as well in. The fact that there was relatively high agreement with the statement 'I think that the GCSEs motivate me to work harder; everything you do in Year 10 and Year 11 is important' indicates that the students were not equating extension tasks with meaningful work and were therefore not choosing to complete them.

There were, therefore, indications that students perceived challenge in relation to the GCSE examinations where they did not perceive the same level of challenge in their current work that was to prepare them for these examinations.

As the students had been specifically asked about their views towards their GCSE examinations, it could be construed that the importance placed upon the role of GCSEs in shaping student attitudes towards challenging work was created through the nature of the questions asked in the focus group and via the questionnaires. However, GCSEs, parents and teachers/school culture had been identified as having a potential influence on student behaviour from the literature (Ames and Ames 1994; Walkerdine et al. 2001; Rogers and Hallam 2006; Rogers 2013). Of these factors, the students indicated stronger agreement with the statements in the survey regarding GCSEs than they did for teacher or parental influence. There was a perception that teachers were grade-focused and a strong indication that parental support was perceived to be at an appropriate level. However, there was a stronger indication that the surveyed students just focused on the grades they wanted to achieve.

### 8.3.2 Girls hold 'performance-approach-style' mastery goals

This section presents a discussion of how achievement goal theory and expectancy value theory could be seen in the responses of the students. The section is linked to the classroom environment as the classroom environment helps to

shape the achievement goals students pursue (Midgley 2002; Elliot 1999; Pintrich 2000) as well as the value they place on learning tasks, which is part of expectancy-value theory (Pintrich and Schunk 2002).

The idea that 'comfortable work' was preferable, and the importance placed on preparation for their GCSE examinations, would seem to indicate that the students surveyed showed a preference for performance goals. When asked why they had chosen certain GCSE subjects, for example, KS4 students showed relatively high agreement with the statement that they made their decision based on how well they were doing in particular subjects and whether or not they enjoyed them. This would suggest that they were not necessarily open to challenging work if they did not believe that they would be able to achieve in those subjects. This would imply a performance-avoid approach (Elliot and McGregor 1999) where the students do not wish to engage with the task if they will not be able to perform highly in it.

Yet, the language used by the students in the focus groups, and which received agreement amongst the surveyed students, would indicate that the students held mastery goals in addition to performance goals. Although a small number of those surveyed indicated that they believed attainment was more important than understanding, which is linked to the idea of a fixed mindset of intelligence (Dweck and Master 2008), the survey respondents largely indicated that they did not believe it was possible to have attainment without understanding. This bears more resemblance to a growth mindset of intelligence that Dweck and Master (2008) found was linked to a mastery-goal approach. In addition, although the survey showed that there was a preference for easier work, there was still moderately high agreement with the statements that accompanied the question 'If you would like your schoolwork to be harder, why is this?' This included statements that indicated a growth mindset (Dweck 1991) and a mastery-approach to learning (Midgely 2002): 'I feel that I am more likely to learn from what I am doing wrong'; I want to put my knowledge into use/apply it to new situations'; and 'I sometimes want to know a little bit more'. There was also low agreement amongst KS4 students for the statement 'The subjects I found

more challenging, I dropped' when they were recording the decisions behind their choice of GCSE subjects. This indicates that whilst students may have chosen the subjects they enjoyed and were doing well in they did not necessarily avoid choosing other subjects that they found more difficult. If they had, this would indicate that the students only held performance goals. If the focus group and the survey students used language or agreed with statements that were linked to both mastery goals and performance goals, then this study has echoed other studies (e.g. Elliot and McGregor 1999; Kaplan et al. 2002) by showing that combinations of achievement goal alignments can be held.

In light of this, perhaps it would be more accurate to say that the girls desired 'comfortable' work as a way of preparing themselves for more challenging tasks. Challenging work can still be 'comfortable' if introduced in an appropriate way, similar to Vygotsky's (1978) idea of zone of proximal development, whereby tasks are set in the area just beyond that which they could accomplish alone. Returning to the comment made by the Year 10 student that work of a moderate difficulty meant that you were 'comfortably understanding', it might be better to read this phrase positively. 'Understanding' is an active learning process (Bloom et al. 1956; Anderson et al. 2001), so 'comfortably understanding' could imply that progress is being made at a pace that is felt to be appropriate for the student to feel that they are able to achieve.

However, the fact that the students indicated that they were not completing extension tasks with any regularity despite indicating that they did not think that their normal work was very challenging, still suggests that the students did not always put a mastery-approach to learning into practice. This was despite showing agreement with the language of a mastery-approach to learning. The desire to experience 'comfortable' understanding may hold the students back from attempting challenging tasks that would enable them to see more rapid improvement in their skills, knowledge and understanding. This may be interpreted as both mastery-avoid (Elliot 1999; Pintrich 2000) as well as performance-avoid (Elliot and McGregor et al. 1999). By extension, where students were indicating a mastery-approach it was for the goal of doing academically well

rather than learning for the sake of learning, which is more akin to performance-approach goals.

Indeed, one of the themes that emerged from the focus groups was the idea that summative assessments provided a motivation to attempt challenging work. There was strong agreement for the idea of 'getting something' once work was completed, such as credit towards an end of year grade, or contribution to skill development that would help them to achieve in an examination. Both the focus groups and surveyed students also suggested that students did not really listen to the messages about learning given by their teachers but focused on the grade that they wanted to achieve. There was strong agreement in the survey for statements that were linked to extrinsic motivation for completing challenging work: 'I am more likely to complete a challenging task if you know that it's going to contribute to help me in an exam'; 'I am more likely to complete a challenging task if someone says that I will get a grade for it'; and 'I am more likely to attempt a challenging task if someone says that I can get a good grade as it boosts my self-esteem'. There was also moderate agreement with the statement 'I will attempt challenging tasks as I don't like letting myself down'. The survey students also showed strong agreement with statements that were related to the achievement structure provided by homework grades and tests. The level of agreement for a performance-goal approach would therefore seem to over-ride the low agreement with the statement 'I do not like challenging work because I'm afraid that I won't be able to do it well'. The fear of not performing well in a challenging task did not emerge as a reason for not doing a challenging task.

Therefore, there appears to be a tension in the goal approaches followed by the students. As the above discussion demonstrates, the students appeared to walk a fine line between the mastery-approach/mastery-avoid/performance-approach/performance-avoid constructs. The students showed awareness of challenging work being beneficial and they were able to use mastery-goal approach language when reflecting on their learning. However, the students' self-reported actions in terms of completion of challenging work and views towards

summative assessment also revealed a strong affinity for performance–approach goals, which seemed to be more dominant than the mastery-approach goals. Any mastery-approach goals seemed to be for the purpose of high academic achievement, which means that the traditional definition of mastery-approach goals does not accurately describe the complexity of the goals held by the students. 'Performance-approach-style' mastery goals may be more a more accurate, if not long-winded, term.

The study therefore further illustrates the complexity of the motivations held by students. It is perhaps unsurprising that Lee and Reeve (2011) found that teachers were not as accurate in gauging student motivation as they were in gauging student engagement. The factors that motivate students are complex and not necessarily constant.

## 8.4 Implications: Girls' descriptions and low self-reported completion of challenging work indicate the importance of inspiring and challenging classrooms

If the students were reporting that the level of classwork they were given could be more challenging and yet the majority of girls surveyed were not readily engaging with challenging work, as indicated by the low frequency of completion of extension tasks, perhaps there is more that schools could do to help students to see the value inherent in more challenging work. Whilst the survey respondents had largely indicated that they did not want their work to be more challenging, they did not strongly disagree with the statements that referred to why one would prefer more difficult work. Therefore, whilst the students may have preferred easier work they were also be able to see the benefits of challenging work. If students are able to see the benefits of challenging work then there is the possibility that teachers could work with the students in order for them to exhibit more mastery-approach behaviours. If the students can be encouraged to see this value within their tasks (Pintrich and Schunk 2002), perhaps they will be more likely to engage with more challenging work in the future.

There are implications for the nature of the tasks that are set by teachers. The focus group students indicated that the type of work they were given often precluded the completion of extension tasks. Sometimes they were given too much work, which meant that they did not have time to do additional work. The students also indicated a willingness to complete challenging tasks if they perceive them as being interesting. The role of the teacher will therefore be to gauge what tasks the students find as being interesting.

The students also gave descriptions of challenging work that indicated limited experience of a variety of tasks. When asked what challenging work looked like in the classroom, the type of tasks that the girls remembered and recognised as being challenging were actually tasks that would not be labeled as higher order thinking skills of analyse, evaluate and create (Bloom et al. 1956; Anderson and Krathwohl et al. 2001). Essay writing, research homework, tasks in timed conditions, group tasks that rely on others' knowledge, tasks that required application of knowledge, and extension questions could all come under the headings of 'remember', 'understand' and 'apply'. Of course, within each of these tasks there is the potential of framing the activities in such a way as to develop higher order thinking skills. Yet the fact that student examples of challenging work in the classroom are prosaic indicates that they were either not regularly given different tasks that explicitly developed the higher order thinking skills; or, if they were, the girls did not value them as learning processes or recognise them as being challenging enough to be able to name them.

However, the focus groups had also said that their decision to complete extension tasks was often based on the difficulty with which they had completed previous work, which may have indicated that homework was sometimes pitched at a suitable level. Focus group students and one of the surveyed students also remarked that the extent to which they were prepared to engage with challenging work varied from subject to subject. This indicated that 'pockets' of appropriate challenge are seen in these schools. It again highlights the importance of student preference and the need for teachers to gauge what interests

their students as a way of encouraging them to engage in more challenging work.

The reasons offered for a preference for easier work, and which received moderate agreement from the surveyed students, further indicated that it is the nature of the work itself that helps to determine the extent to which the students desire to complete it. The most popular reason was that difficult work could lead to a feeling of stress, followed by the idea that some work can be irrelevant. However, challenging tasks need not necessarily be of this nature if introduced with a student's zone of proximal development (Vygotsky 1978) in mind. Following Vygotsky's theory, stress could be alleviated with appropriate scaffolding that is gradually taken away; and student stress and a perception that tasks are irrelevant could be lessened by an attempt to show students the value in the activities as well as ensuring the tasks are of a good quality and amount (Anderman et al. 2001). Indeed, the surveyed students showed moderate agreement with the idea that easier work enables students to get better at something before pushing themselves further. This indicates that the students were aware of the concept of a zone of proximal development, without necessarily knowing the specific term, and that they are not adverse to the idea of pushing themselves further. As discussed previously, 'comfortable' can offer the opportunity for progression to 'challenging', if introduced appropriately by teachers.

Indeed, the level of agreement with the statements that referred to reasons for a preference for harder work were only slightly lower than the agreement for the statements referring to reasons for a preference for easier work. The fact that there was moderate agreement with the ideas that the students sometimes want to know a bit more, that they feel they are more likely to learn from what they are doing wrong and that they want to put their knowledge into use/apply it to new situations, does indicate that the students are receptive to appropriately challenging work. If they do not feel very challenged by their current work, perhaps there is scope for making tasks more challenging as well as ensuring

they are created with intrinsic interest for the students to want to complete them (Bennett 2014).

## 8.5 Conclusion

The study therefore concludes that an appropriately academically inspiring climate within each classroom might help students to commit to the development and application of mastery-approach goals in addition to the performance-approach goals students show a preference for. This could involve asking the students for their perceptions of the challenge they perceive in their work as well as seeking to move each student from their individual zone of proximal development (Vygotsky 1978) and it may lead students to engage with more challenging tasks. Without this, selective girls' independent schools may be helping their students to achieve high grades without encouraging all to fully realise their academic potential.

## 8.6 Contribution to knowledge

The findings of this study have therefore made the following contributions to our knowledge about girls' perceptions of challenging work in the selective independent sector in the transition between KS3 and KS4:

- Girls in the selective independent sector were able to offer rich definitions of challenging work that bore resemblance to theories of deep learning, which indicated that they have experience of work that they would deem challenging.
- What constitutes as 'challenge' is individually defined but there is little difference between views in the two Key Stages of KS3 and KS4. This indicated that any changes in the perceptions of students towards challenging work, or the factors that motivate them to complete it, may not occur in the transition from KS3 into KS4.
- 'More able' girls in the study showed an openness towards more challenging work.

- Most girls in the study wanted ‘comfortable’ work, not challenging work. Challenging work can be uncomfortable and not all students enjoyed this feeling, whilst some students would have liked to complete work at a slower pace. This has implications for how teachers assess the best way to scaffold the learning tasks of students so that they are encouraged to engage with challenging work.
- GCSEs provided a key contextual factor in causing performance goals to dominate student behaviour and readiness to engage with challenging work.
- Girls in the study appeared to hold both performance goals and mastery goals but mastery goals are held for performance reasons. This adds to our understanding of the tension experienced by students in their learning. Students are motivated to engage with challenging work in order to achieve, and this motivation to achieve can be based on the desire to show that they can achieve (performance-approach goals), as well as learning for the sake of learning (mastery-approach goals) so that ultimately they can achieve (performance-approach goals).
- Girls’ low self-reported completion of extension work in the study indicated the importance of inspiring and challenging classrooms, where students receive appropriate scaffolding in challenging tasks. Classrooms could therefore be developed in such a way as to provide support for risk-taking in learning and value for deep approaches in learning.

## 8.7 Limitations of the study and areas for future research

### 8.7.1 Constraints of sample

The survey was only conducted with girls in Years 9, 10 and 11 from three selective independent girls’ schools in North London and surrounding area, and the findings of the study should be understood within these boundaries. Further use of this survey with a greater variety of schools would indicate the extent to which the views of the students in this study were held more widely. This could

include non-selective fee-paying schools, state schools, rural schools, mixed schools and with male students in single-sex schools.

### 8.7.2 Value of longitudinal studies

It would be useful to conduct longitudinal studies to assess whether attitudes to challenging work change earlier in KS3 than Year 9, as there were very few statistically significant differences between the attitudes of the KS3 students in the study and KS4 students. It would also be interesting to see whether there are further changes in attitude to challenging work post-KS4. A longitudinal study may also reveal the extent to which students switch achievement goals and the reasons for these changes, as this study was only able to provide a snapshot of student perceptions and attitudes. For example, are there noticeable changes in perceptions and achievement goals with immediate proximity to the GCSE examinations?

### 8.7.3 Comparison with teacher perceptions

The level of challenge within the tasks given to the students was not investigated, only the student perceptions of the extent to which they felt challenged by their current work. Whilst the survey indicated the students' perceptions and the factors they felt would encourage them to engage with challenging work, it might be useful to gather the perceptions of the teachers at these schools. These could be used to explore the differences between the student perceptions of the level of challenge in their work and how they react to it, and the teacher perceptions of the level of challenge in the work that is set for the students and how the students engage with it.

### 8.7.4 A study of the influence of parents on student perceptions of challenging work

It was beyond the scope of this study to investigate the role that parents play in influencing their daughters in their perceptions of challenging work but this is

an important area that could be considered in a further study. Maxwell and Aggleton's (2014) Bourdieusian understanding of social and cultural reproduction in the context of independent schools could be extended into an investigation of how the three domains of the family, the school and girls' perception of self, work together to shape the motivational reasons and extent to which girls will engage with challenging work. Such an investigation would connect the study explored in this thesis, which was mostly linked to the third domain (student perceptions) to a broader, sociological understanding of how the families and the independent schools themselves shape the motivations, aspirations and behaviours of students in the girls' selective independent sector.

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# Appendix 1: Independent-samples t-test results

## Table A Comparison of Student definitions of challenging work

| | Key Stage | No. (100%) | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|
| Work that makes you think or stretches you | KS3 | 63 | 4.29 | .71 | t = .29 (190), p = .53 |
| | KS4 | 129 | 4.26 | .64 | |
| Work that gets you to apply your own knowledge to new situations | KS3 | 63 | 3.49 | .74 | t = -.85 (190), p = .29 |
| | KS4 | 129 | 3.60 | .83 | |
| Tasks that are harder than normal classwork or homework | KS3 | 63 | 3.86 | .88 | t = -.32 (190), p = .21 |
| | KS4 | 129 | 3.90 | .83 | |
| You have to push yourself a bit further so that you can complete it | KS3 | 63 | 4.16 | .65 | t = -.36 (190), p = .61 |
| | KS4 | 129 | 4.19 | .64 | |
| Finding new ways of tackling problems | KS3 | 63 | 3.52 | .86 | t = .31 (190), p = .54 |
| | KS4 | 129 | 3.48 | .92 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

## Table B Comparison of Student descriptions of challenging work in the classroom

| | Key Stage | No. (100%) | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|
| Essays | KS3 | 63 | 3.30 | .94 | t = .51 (190), p = .61 |
| | KS4 | 129 | 3.22 | 1.00 | |
| Group research tasks that rely on other people's contributions | KS3 | 63 | 2.73 | .94 | t = .07 (190), p = .95 |
| | KS4 | 129 | 2.72 | .90 | |
| Tasks that require you to use your own knowledge | KS3 | 63 | 3.71 | .73 | t = .94 (190), p = .35 |
| | KS4 | 129 | 3.60 | .85 | |
| Work completed under timed conditions | KS3 | 63 | 3.52 | .90 | t = -.30 (190), p = .77 |
| | KS4 | 129 | 3.57 | .93 | |
| Research homeworks | KS3 | 63 | 2.67 | .86 | t = -.81 (190), p = .42 |
| | KS4 | 129 | 2.78 | .88 | |
| Extension questions | KS3 | 63 | 3.73 | .90 | t = .32 (190), p = .75 |
| | KS4 | 129 | 3.69 | .78 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

## Table C Comparison of Student perception of subject work difficulty

| | Key Stage | No. | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|
| Art | KS3 | 59 | 2.03 | .77 | t = -5.20 (102), p = .00 |
| | KS4 | 55 | 2.89 | .98 | |
| Classical Civilisation | KS3 | 10 | 2.40 | 2.40 | t = -.26 (17), p = .25 |
| | KS4 | 9 | 3.00 | 3.00 | |
| Drama | KS3 | 58 | 2.31 | 1.06 | t = -2.24 (88), p = .03 |
| | KS4 | 32 | 2.84 | 1.11 | |
| English | KS3 | 61 | 3.05 | 1.01 | t = -.79 (188), p = .43 |
| | KS4 | 129 | 3.17 | .99 | |
| Geography | KS3 | 61 | 2.92 | .84 | t = -.40 (126), p = .69 |
| | KS4 | 67 | 2.99 | 1.04 | |
| History | KS3 | 61 | 2.97 | .98 | t = -2.30 (147), p = .23 |
| | KS4 | 88 | 3.34 | .97 | |
| ICT | KS3 | 61 | 2.74 | 1.14 | t = .65 (79), p = .52 |
| | KS4 | 20 | 2.55 | 1.10 | |
| Language/s | KS3 | 61 | 3.54 | 1.25 | t = 2.39 (187), p = .02 |
| | KS4 | 128 | 3.11 | 1.12 | |
| Latin | KS3 | 45 | 2.84 | 1.30 | t = -1.50 (58), p = .14 |
| | KS4 | 15 | 3.40 | 1.06 | |
| Mathematics | KS3 | 61 | 3.23 | 1.16 | t = -.02 (188), p = .96 |
| | KS4 | 129 | 3.23 | 1.00 | |
| Music | KS3 | 60 | 2.52 | 1.16 | t = -1.56 (77), p = .12 |
| | KS4 | 19 | 3.00 | 1.25 | |
| Religious Education | KS3 | 61 | 2.69 | .89 | t = 3.09 (162), p = .00 |
| | KS4 | 103 | 2.22 | .96 | |
| Sciences | KS3 | 61 | 3.41 | 1.13 | t = -.61 (188), p = .54 |
| | KS4 | 129 | 3.51 | 1.04 | |

*Mean: 1 = very easy; 2 = easy; 3 = fine; 4 = hard; 5 = very hard

## Table D Comparison of Student perception of change in work difficulty

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| Do you notice a difference in the standard of work you complete this year compared to last year? | KS3 | 63 | 2 | 3.85 | .87 | t = -3.53 (188), p = .00 |
| | KS4 | 129 | 0 | 4.29 | .75 | |

*Mean: 1 = easier in all subjects; 2 = easier in some subjects; 3 = much the same; 4 = harder in some subjects; 5 = harder in all subjects

## Table E Comparison of Student preference for harder or easier work

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| Would you like your schoolwork to be easier (1) or harder (5) | KS3 | 63 | 2 | 2.80 | .77 | t = 2.31 (188), p = .02 |
| | KS4 | 129 | 0 | 2.55 | .67 | |

*Mean: 1 = easier in all subjects; 2 = easier in some subjects; 3 = much the same; 4 = harder in some subjects; 5 = harder in all subjects

## Table F Comparison of Student reasons for preference for easier work

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| I would not like my schoolwork to be easier | KS3 | 59 | 4 | 2.83 | 1.02 | t = -.39 (179), p = .70 |
| | KS4 | 122 | 7 | 2.89 | 1.04 | |
| I find the difficulty of the work can make me stressed | KS3 | 60 | 3 | 3.72 | 1.04 | t = -2.09 (98), p = .39 |
| | KS4 | 122 | 7 | 4.04 | .85 | |
| I find some of the work irrelevant | KS3 | 58 | 5 | 3.33 | 1.07 | t = -.91 (177), p = .36 |
| | KS4 | 121 | 11 | 3.47 | .94 | |
| You can get better before pushing yourself further if the work is at an easier level | KS3 | 57 | 6 | 3.28 | 1.05 | t = 1.05 (175), p = .30 |
| | KS4 | 120 | 9 | 3.12 | .94 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

## Table G Comparison of Student reasons for preference for harder work

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| I would not like my schoolwork to be harder | KS3 | 60 | 3 | 3.22 | 1.17 | t = -1.74 (185), p = .08 |
| | KS4 | 127 | 2 | 3.51 | 1.05 | |
| I feel that I am more likely to learn more from what I'm doing wrong | KS3 | 57 | 6 | 3.26 | .99 | t = .38 (177), p = .71 |
| | KS4 | 122 | 7 | 3.20 | .94 | |
| I want to put my knowledge into use/apply it to new situations | KS3 | 58 | 5 | 3.50 | .90 | t = .80 (179), p = .43 |
| | KS4 | 123 | 6 | 3.39 | .85 | |
| I sometimes want to know a little bit more | KS3 | 58 | 5 | 3.53 | .88 | t = 1.05 (181), p = .30 |
| | KS4 | 125 | 4 | 3.38 | .98 | |
| I find the work can be repetitive | KS3 | 57 | 6 | 3.14 | 1.06 | t = 1.89 (177), p = .35 |
| | KS4 | 122 | 7 | 3.28 | .93 | |
| Sometimes we are challenged in quantity rather than quality | KS3 | 59 | 4 | 3.44 | 1.16 | t = -1.93 (181), p = .06 |
| | KS4 | 124 | 5 | 3.78 | 1.09 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

## Table H Comparison of Student enjoyment of current work

| | Key Stage | No. | No response | Mean | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| On a scale of 1 to 5 with 5 being the highest, how much do you enjoy the schoolwork you are currently given to complete? | KS3 | 63 | 2 | 3.34 | .85 | t = 3.01 (188), p = .00 |
| | KS4 | 129 | 0 | 2.95 | .85 | |

## Table I Comparison of frequency of extension work completion

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| Optional essays | KS3 | 63 | 3 | 1.53 | .68 | t = .35 (183), p = .78 |
| | KS4 | 129 | 4 | 1.50 | .69 | |
| Planning/ carrying out additional scientific experiments | KS3 | 63 | 3 | 1.92 | .81 | t = 3.15 (183), p = .02 |
| | KS4 | 129 | 4 | 1.54 | .72 | |
| A research/ homework task that goes beyond syllabus content | KS3 | 63 | 3 | 2.20 | .73 | t = .40 (183), p = .69 |
| | KS4 | 129 | 4 | 2.15 | .09 | |
| Extension questions | KS3 | 63 | 3 | 2.63 | .86 | t = 1.88 (183), p = .06 |
| | KS4 | 129 | 4 | 2.39 | .79 | |

* Mean: 1 = never; 2 = sometimes; 3 = often; 4 = always

## Table J Comparison of Student preference for extension work

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| Optional essays | KS3 | 63 | 3 | 2.52 | .93 | t = 1.46 (183), p = .15 |
| | KS4 | 129 | 4 | 2.29 | 1.03 | |
| Planning/ carrying out additional scientific experiments | KS3 | 63 | 3 | 3.15 | 1.06 | t = 3.39 (183), p = .001 eta = .06 |
| | KS4 | 129 | 4 | 2.56 | 1.13 | |
| A research/ homework task that goes beyond syllabus content | KS3 | 63 | 3 | 3.05 | 1.05 | t = .20 (183), p = .84 |
| | KS4 | 129 | 4 | 3.02 | 1.11 | |
| Extension questions | KS3 | 63 | 3 | 3.77 | .89 | t = 2.62 (183), p = .01 eta = .04 |
| | KS4 | 129 | 4 | 3.35 | 1.06 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

## Table K Comparison of Student perceptions of importance of understanding versus attainment

| | Key Stage | No. | No response | Mean | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| What's more important to you, understanding or attainment? | KS3 | 60 | 3 | 2.40 | .89 | t = -.18 (183), p = .86 |
| | KS4 | 125 | 4 | 2.42 | .85 | |

## Table L Comparison of factors behind GCSE subject choice

| **Q. How did you make your GCSE choices?** | | | | | |
|---|---|---|---|---|---|
| | Year Group | No. (100%) | Mean* | Std. Deviation | Statistical significance |
| I picked the subjects I really enjoyed | 10 | 64 | 4.00 | .76 | t = 1.43 (127), p = .16 |
| | 11 | 65 | 3.80 | .83 | |
| I based my subject choices on what I'll get out of a subject in the long run e.g. university place, career | 10 | 64 | 3.70 | .90 | t = 2.99 (127), p = .001 |
| | 11 | 65 | 3.17 | 1.11 | |
| I made decisions based on how well I was doing in particular subjects | 10 | 64 | 3.70 | .77 | t = -.03 (127), p = .97 |
| | 11 | 65 | 3.71 | .77 | |
| I wanted to have a mix of subjects to keep my options open for the future | 10 | 64 | 3.55 | .94 | t = .67 (127), p = .50 |
| | 11 | 65 | 3.43 | 1.02 | |
| I chose subjects I felt that my parents/ teachers wanted me to choose | 10 | 64 | 2.22 | .93 | t = -1.38 (127), p = .17 |
| | 11 | 65 | 2.48 | 1.17 | |
| I based my choices on the experiences of an older sibling | 10 | 64 | 2.03 | 1.02 | t = .09 (127), p = .93 |
| | 11 | 65 | 2.02 | .99 | |
| The subjects which I found more challenging, I dropped | 10 | 64 | 2.77 | 1.08 | t = .36 (127), p = .72 |
| | 11 | 65 | 2.69 | 1.25 | |
| I found it really hard to decide which subjects to choose | 10 | 64 | 3.17 | 1.12 | t = .40 (127), p = .69 |
| | 11 | 65 | 3.09 | 1.11 | |
| I am pleased with the subjects I have chosen | 10 | 64 | 3.94 | .87 | t = 1.66 (127), p = .10 |
| | 11 | 65 | 3.65 | 1.11 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

## Table M Comparison of Year 10 and Year 11 feelings towards GCSE examinations

| **Q. How do you feel about your GCSE examinations?** | | | | | |
|---|---|---|---|---|---|
| | Year Group | No. (100%) | Mean* | Std. Deviation | Statistical significance |
| I feel worried about my GCSE examinations | 10 | 64 | 4.25 | .78 | t = .22 (127), p = .83 |
| | 11 | 65 | 4.22 | 1.02 | |
| I'm not as worried as I used to be when I was younger because I realise that I can keep up with the workload | 10 | 64 | 2.92 | .93 | t = .51 (127), p = .62 |
| | 11 | 65 | 2.83 | 1.11 | |
| I don't feel that the GCSEs are real for me yet | 10 | 64 | 3.12 | 1.05 | t = -1.48 (127), p = .14 |
| | 11 | 65 | 3.42 | 1.18 | |
| For the subjects I'm not very good at I'm scared; but for the subjects I'm feeling confident in right now I'm not too worried yet | 10 | 64 | 3.75 | 1.02 | t = .06 (127), p = .95 |
| | 11 | 65 | 3.74 | 1.12 | |
| I think that the GCSEs motivate me to work harder: everything you do in Year 10 and Year 11 is important | 10 | 64 | 3.84 | .82 | t = 1.90 (127), p = .06 |
| | 11 | 65 | 3.52 | 1.08 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

**Table N Comparison of Student perceptions of factors encouraging attempts at challenging work**

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| I am more likely to complete a challenging task if you know that it's going to contribute to help me in an exam | KS3 | 63 | 3 | 3.98 | .79 | t = -2.13 (183), p = .03 |
| | KS4 | 129 | 4 | 4.22 | .64 | |
| I am more likely to complete a challenging task if I will get a grade for it | KS3 | 63 | 3 | 3.78 | .96 | t = -.63 (183), p = .53 |
| | KS4 | 129 | 4 | 3.87 | .87 | |
| I am more likely to complete a challenging task if I am interested in it | KS3 | 63 | 3 | 4.37 | .66 | t = -.40 (183), p = .69 |
| | KS4 | 129 | 4 | 4.41 | .65 | |
| I am more likely to complete a challenging task if my teacher's given us a lot of background to the subject | KS3 | 63 | 3 | 3.65 | .73 | t = -1.60 (183), p = .11 |
| | KS4 | 129 | 4 | 3.85 | .81 | |
| I find it really satisfying when you finish a challenging task | KS3 | 63 | 3 | 3.98 | .91 | t = .16 (183), p = .87 |
| | KS4 | 129 | 4 | 3.96 | .92 | |
| I am competitive so I complete challenging tasks so that I can be better than other people or stay the same standard as other people | KS3 | 63 | 3 | 1.06 | .14 | t = -.01 (183), p = .99 |
| | KS4 | 129 | 4 | 1.13 | .10 | |
| I will attempt challenging tasks as I don't like letting myself down | KS3 | 63 | 3 | 3.40 | .85 | t = 1.86 (183), p = .06 |
| | KS4 | 129 | 4 | 3.13 | .97 | |
| I am more likely to attempt a challenging task if someone says that I can get a good grade as it boosts my self-esteem | KS3 | 63 | 3 | 3.70 | .85 | t = -.03 (183), p = .06 |
| | KS4 | 129 | 4 | 3.70 | .82 | |
| I do not like challenging work because I'm afraid that I won't be able to do it well | KS3 | 63 | 3 | 2.83 | 1.12 | t = -.45 (183), p = .65 |
| | KS4 | 129 | 4 | 2.91 | 1.10 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

**Table O Comparison of Student perception of impact of test results and homework grades**

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| I think it is more important to learn from my mistakes than to get a high grade or mark | KS3 | 63 | 3 | 3.20 | .92 | t = .45 (183), p = .65 |
| | KS4 | 129 | 4 | 3.14 | .89 | |
| I revise harder for tests that go towards a report sent home to my parents | KS3 | 63 | 3 | 3.57 | .96 | t = 1.02 (183), p = .31 |
| | KS4 | 129 | 4 | 3.40 | 1.08 | |
| I am disappointed when I get a low mark or grade | KS3 | 63 | 3 | 4.33 | .63 | t = .44 (183), p = .66 |
| | KS4 | 129 | 4 | 4.38 | 1.08 | |
| I like to know what mark or grade other people in the class get | KS3 | 63 | 3 | 3.73 | .90 | t = 1.23 (183), p = .22 |
| | KS4 | 129 | 4 | 3.55 | .95 | |
| I don't mind other people in the class knowing what mark or grade I get for my work | KS3 | 63 | 3 | 3.08 | 1.08 | t = -.75 (183), p = .45 |
| | KS4 | 129 | 4 | 3.20 | .94 | |
| If I get a low grade or mark I feel that it is my responsibility to improve my performance | KS3 | 63 | 3 | 4.07 | .84 | t = .22 (88.9), p = .83 |
| | KS4 | 129 | 4 | 4.04 | .60 | |
| If I get a low grade or mark I feel motivated to improve my performance | KS3 | 63 | 3 | 3.67 | .95 | t = .92 (183), p = .36 |
| | KS4 | 129 | 4 | 3.52 | 1.04 | |
| If I get a low grade or mark I think that my teacher should do more to help me to improve | KS3 | 63 | 3 | 3.65 | .95 | t = -.42 (183), p = .67 |
| | KS4 | 129 | 4 | 3.71 | .92 | |
| I only enjoy learning a subject when I feel that I am | KS3 | 63 | 3 | 3.53 | 1.08 | t = -.64 (183), p = .52 |

| | | | | | | |
|---|---|---|---|---|---|---|
| achieving high marks or grades | KS4 | 129 | 4 | 3.64 | 1.04 | |
| I don't mind if I don't achieve highly in a subject that I don't enjoy | KS3 | 63 | 3 | 2.75 | 1.06 | t = 2.84 (183), p = .01 |
| | KS4 | 129 | 4 | 2.46 | 1.10 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

## Table P Comparison of Student perceptions of teacher talk

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| My teachers encourage us to do our own re-search outside of what we're already doing in class | KS3 | 63 | 2 | 2.98 | .79 | t = -.31 (188), p = .76 |
| | KS4 | 129 | 0 | 3.02 | .86 | |
| My teachers try to put us outside our comfort zone | KS3 | 63 | 2 | 3.21 | .78 | t = -.72 (188), p = .47 |
| | KS4 | 129 | 0 | 3.30 | .81 | |
| My teachers are always bringing up GCSEs and tests or Summer exams | KS3 | 63 | 2 | 3.62 | .95 | t = -2.78 (188), p = .01 |
| | KS4 | 129 | 0 | 4.03 | .94 | |
| My teachers regularly link our work to real life situations | KS3 | 63 | 2 | 2.90 | .79 | t = .43 (142), p = .67 |
| | KS4 | 129 | 0 | 2.84 | .97 | |
| My teachers do not say they expect us to get certain grades | KS3 | 63 | 2 | 3.00 | 1.05 | t = 1.32 (188), p = .19 |
| | KS4 | 129 | 0 | 2.80 | .95 | |
| I feel as if my teachers are just getting through the syllabus | KS3 | 63 | 2 | 2.95 | .97 | t = -2.57 (188), p = .01 |
| | KS4 | 129 | 0 | 3.32 | .89 | |
| I feel like there's a lot of focus around grades | KS3 | 63 | 2 | 3.39 | .99 | t = -2.77 (188), p = .01 |
| | KS4 | 129 | 0 | 3.81 | .94 | |
| My teachers often compare our individual performance with the rest of the year group | KS3 | 63 | 2 | 2.79 | 1.02 | t = -1.30 (188), p = .20 |
| | KS4 | 129 | 0 | 3.00 | 1.08 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| My teachers encourage us to compare our own performance with what we could have done | KS3 | 63 | 2 | 3.49 | .83 | t = .09 (188), p = .93 |
| | KS4 | 129 | 0 | 3.48 | .81 | |
| My teachers do not usually say that work is hard | KS3 | 63 | 2 | 3.46 | .77 | t = 1.86 (188), p = .07 |
| | KS4 | 129 | 0 | 3.21 | .91 | |
| I just focus on the grade that I want to achieve | KS3 | 63 | 2 | 3.59 | .88 | t = -.59 (188), p = .56 t = -.31 (188), p = .76 |
| | KS4 | 129 | 0 | 3.67 | .95 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

## Table Q Comparison of Student perceptions of parent talk

| | Key Stage | No. | No response | Mean* | Std. Deviation | Statistical significance |
|---|---|---|---|---|---|---|
| My parent/s encourage me to learn from my mistakes | KS3 | 63 | 2 | 3.92 | .71 | t = 1.37 (188), p = .17 |
| | KS4 | 129 | 0 | 3.76 | .81 | |
| My parent/s don't mind too much about my grades; they're more concerned about the effort I put into my work | KS3 | 63 | 2 | 3.26 | 1.17 | t = .61 (188), p = .54 |
| | KS4 | 129 | 0 | 3.15 | 1.23 | |
| Although my parent/s say that they don't really mind about the grades I get, I know that they do actually mind quite a lot | KS3 | 63 | 2 | 3.31 | 1.06 | t = -1.04 (188), p = .30 |
| | KS4 | 129 | 0 | 3.49 | 1.11 | |
| My parent/s will get quite annoyed if I got a bad grade | KS3 | 63 | 2 | 2.87 | 1,13 | t = -2.15 (188), p = .03 |
| | KS4 | 129 | 0 | 3.28 | 1.28 | |
| My parent/s don't push me much | KS3 | 63 | 2 | 2.49 | 1.19 | t = -1.27 (188), p = .21 |
| | KS4 | 129 | 0 | 2.69 | 1.01 | |
| I really don't like talking to | KS3 | 63 | 2 | 2.87 | 1.19 | t = -1.08 (188), p = .28 |

| | | | | | | |
|---|---|---|---|---|---|---|
| my parent/s about school-work because I'd much prefer to just do it and get it over and done with | KS4 | 129 | 0 | 3.09 | 1.34 | |
| My parent/s always compare my performance at school to my siblings or my friends | KS3 | 63 | 2 | 2.80 | 1.25 | t = -.96 (188), p = .34 |
| | KS4 | 129 | 0 | 3.01 | 1.43 | |
| I think that my parent/s give me the right amount of support to help me to feel good about my learning | KS3 | 63 | 2 | 3.98 | .99 | t = 2.00 (188), p = .05 |
| | KS4 | 129 | 0 | 3.68 | .96 | |

*Mean: 1 = strongly disagree; 5 = strongly agree

# Appendix 2: Ethics Form

# Ethics Application Form: Research Degree Students

Leading education and social research
Institute of Education
University of London

All student research that use research methods to collect data from human participants is required to gain ethical approval before starting. Please answer all relevant questions. Your form may be returned if incomplete. Please write your responses in terms that can be understood by a lay person.

For further support and guidance please see Ethics Review Procedures for Student Research http://www.ioe.ac.uk/about/policiesProcedures/42253.html, contact your supervisor or researchethics@ioe.ac.uk.

## Section 1 Project details

| | | |
|---|---|---|
| a. | Project title | The transition from Key Stage 3 to Key Stage 4: Girls' goal orientations, their perceptions of challenging work and the factors that motivate them to take risks in learning within the selective independent sector. |
| b. | Student name | Gemma Hannan |
| c. | Supervisor | Andrea Creech |
| d. | Advisory committee members | Lynne Rogers; Holly Smith |
| e. | Department | CCM |
| f. | Faculty | FCL |
| g. | Intended research start date | May 2013 |
| h. | *Intended research end date* | November 2013 |
| i. | Funder (if applicable) | N/A |
| j. | Funding confirmed? | N/A |
| k. | Country fieldwork will be conducted in<br>*If research to be conducted abroad please check www.fco.gov.uk If the FCO advice against travel a full travel risk assessment form should also be completed and submitted: http://intranet.ioead/ioe/cms/get.asp?cid=14460&14460_0=22640* | United Kingdom |
| l. | All research projects at the Institute of Education are required to specify a professional code of ethics according to which the research will be conducted. Which organisation's research code will be used? | BERA |
| m. | *If your research is based in another institution then you may be required to submit your research to that institution's ethics review process. If your research involves patients recruited through the NHS then you will need to apply for ethics approval through an NHS Local Research Ethics Committee. In either of these cases, you don't need ethics approval from the Institute of Education.*<br>Has this project been considered by another (external) Research Ethics Committee? | Yes ☐ No X ⇨ *go to Section 2* |

*If so, please insert the name of the committee, the date on which the project was considered, and attach the approval letter in either hard or electronic format with this form.*

External Committee Name: Date of Approval:

⇨ *If your project has been externally approved please go to* ***Section 8 Attachments.***

## Section 2 Research Summary

Please provide an overview of your research. This can include some or all of the following: purpose of the research, aims, main research questions, research design, participants, sampling, data collection, reporting and dissemination. *It is expected that this will take approximately 200-300 words, and you may write more if you feel it is necessary.*

**Purpose/aims of research**

I am interested in how more able girls, educated in the selective independent sector, perceive their learning: what they recognise as being challenging; what their attitudes and feelings are in relation to challenging work and how they think they respond to challenging work. In particular, I am interested in the transition between the end of Key Stage Three into Key Stage four and whether there is a change in these attitudes. These attitudes will be interpreted mainly through the lens of goal orientations, with a focus on mastery goals, performance goals and social goals.

**Main research questions**

1. **What do girls in the transition between KS3 and KS4 in the selective independent sector perceive as challenging work and what do they feel about it?**
2. **How do girls in the transition between KS3 and KS4 in the selective independent sector think they respond to challenging work and what factors do they think enable them to engage with challenging work?**
3. **Are there specific contextual factors that are associated with engaging with challenging work in particular year groups of Year 9, Year 10 and Year 11?**
4. **Are there specific contextual factors that are associated with engaging with challenging work in particular year groups of Year 9, Year 10 and Year 11?**
5. **Are there differences between three independent schools in the perceptions of girls in the transition between KS3 and KS4 towards challenging work?**

**Research design and data collection**

The design of this case study is mixed methods research, being both qualitative (focus group interviews) and quantitative (survey responses). From an epistemological point of view, I hold a combination of constructionist and constructivist ideas. I recognise that during this study there will be times when I and the students in the focus groups will be engaged in individual meaning-making about more able girls' perceptions of challenging work and goal orientations (constructivism); but at other points there will also be a collective generation and transmission of meaning about these student perceptions as I use their interpretations and the survey results to create a more unified picture of their attitudes towards challenging work and their goal orientations (constructionism) (Crotty 1998). In another sense, my theoretical perspective is interpretivist, as I will be seeking a 'culturally derived and historically situated interpretation' (Crotty, 1998: 67) of student perceptions in three school contexts, interpreting their responses within a snapshot of time. And, whilst I will try to make connections between the three schools, they will still be of a very similar 'type', meaning that I will not be able to claim that the student views apply across multiple settings.

I will conduct focus groups of around 5-8 students in Years 9 and 10 from my institution, surveying their goal orientations and attitudes to different aspects of learning such as challenge or difficulty of work, classroom climate and their perceptions of teacher expectations. These group interviews will be semi-structured to allow the students to take the conversation into unexpected areas but from the basis of pre-designed questions that will be asked to each of the groups to aid comparison. The fact that I will be able to probe and prompt responses of the students for clarification will help with the accuracy of my later analysis of the meetings (Dowling and Brown 2010); while the presence of more than one student will hopefully help me to assess where there is a consistent and shared view, and thus should be included in the survey (Robson 2002).

The discussions will then be analysed for themes that will then be converted into a student survey. The analysis of the focus groups will be carried out using Microsoft Word as I will be working on an Apple computer, which does not support NVivo software, and because there will only be seven discussions at the most. The thematic analysis of the surveys will mean that I will be able to use the language and ideas of the students in the focus groups, which will reflect the larger body of students that will complete the survey, giving them more of a voice in the research. This is important as the study is centred on student perceptions.

The survey itself will consist of questions based on a five-point Likert rating scale and will be created on Survey Monkey. This has the added advantage of being administered electronically and without my presence at the schools when the students are carrying out the surveys, and it will also help with the collation of data. Questions will mainly consist of a series of options for students to choose from and there will not be many open-ended questions due to the numbers of respondents. The quantitative data will be analysed using SPSS, whilst the qualitative data from the open-ended questions will be grouped together into similar themes. Analysis of variance will be used to analyse the differences between students in different age groups, as well as comparing the data from the different schools involved in the study. The patterns looked for will include differences in motivation or attitudes towards challenging work between different groups of students and student perceptions of the goal orientations created within schools. As the independent sector uses a variety of achievement indicators, most of which comprise of teacher assessments, it may not be possible to look at whether certain attitudes are predictors of achievement – it will not be possible to standardise these results across the schools.

**Participants and sampling**

Participants for the focus groups will be invited to attend from the Whole School Gifted and Talented Register at my institution. They will be invited from Years 9 and 10. The participants who are eventually part of the focus group will therefore be self-selecting to a large extent. In the October/November of the following academic year, students from a randomly selected form from Year 9, Year 10 and Year 11 in my own institution and two further selective independent girls' schools will be invited to take part in a survey that will have been created from the focus group data. The reason that students will be taken from across these year groups is due to the timing of the research – they will only recently have entered that year group and may their perceptions may therefore be more of a reflection of how they felt towards their learning in the previous academic year rather than being an accurate reflection of the year they would be in at the time of research. If each form has around 20 students this will generate data from around 60 students per school and 180 students across the three schools. The range of the students to be surveyed means that it will be possible to make generalisations for year groups across the three schools as well as show changes between the different year groups.

**Reporting and dissemination**

Each of the schools will receive a summary of the survey details from their institution including a brief analysis of what this shows and some recommendations the school may wish to follow up in the development of their teaching and learning. This will most likely be sent on completion of the thesis. Additionally, an executive summary of the thesis will be provided for the schools to enable them to see the overall findings of the study.

**References:**

Crotty, M. (1998). *The Foundations of Social Research: meaning and perspective in the research process*. London: SAGE Publications.

Dowling, P. and Brown, A. (2010). *Doing Research/Reading Research: Re-interrogating Education*. Oxon: Routledge.

Robson, C. (2002). *Real World Research*. Second Edition. Oxford: Blackwell Publishing.

## Section 3 Research participants Tick all that apply

- ☐ Early years/pre-school
- ☐ Primary School age 5-11
- X Secondary School age 12-16
- ☐ Young people aged 17-18
- ☐ Unknown
- ☐ Advisory/consultation groups
- ☐ No participants
- ☐ Adults *please specify below*

## Section 4 Research methods Tick all that apply

- ☐ Interviews
- X Focus groups
- X Questionnaire
- ☐ Action research
- ☐ Observation
- ☐ Literature review
- ☐ *Controlled trial/other intervention study*
- ☐ Use of personal records
- ☐ Systematic review
- ☐ Secondary data analysis
- ☐ Other, give details:

## Section 5 Systematic reviews Only complete if systematic reviews will be used

a. Will you be collecting any new data from participants? Yes ☐ No ☐

b. Will you be analysing any secondary data? Yes ☐ No ☐

## Section 6 Secondary data analysis Only complete if secondary data analysis will be used

a. Name of dataset/s

b. Owner of dataset/s

c. Are the data in the public domain? Yes ☐ No ☐

*If no, do you have the owner's permission/license?* Yes ☐ No* ☐

d. Are the data anonymised? Yes ☐ No ☐

*Do you plan to anonymise the data?* Yes ☐ No* ☐

*D o you plan to use individual level data?* Yes* ☐ No ☐

*Will you be linking data to individuals?* Yes* ☐ No ☐

e. Are the data sensitive (DPA definition)? Yes* ☐ No ☐

f. Will you be conducting analysis within the remit it was originally collected for? Yes ☐ No* ☐

*Was consent gained from participants for subsequent/future analysis?* Yes ☐ No* ☐

*Was data collected prior to ethics approval process?* Yes ☐ No* ☐

⇨ *If you have ticked any asterisked responses, this indicates possible increased ethical issues for your research please give further details in* ***Section 7 Ethical Issues***

## Section 7 Ethical issues

What are the ethical issues which may arise in the course of your research, and how will they be addressed? It is important that you demonstrate your awareness of potential risks or harm that may arise as a result of your research. You should then demonstrate that you have considered ways to minimise the likelihood and impact of each potential harm that you have identified. Please be as specific as possible in describing the ethical issues you will have to address. Please consider / address ALL issues that may apply.
*A minimum of 200 words is required. Less than this and your application may be returned to you.*
*Ethical concerns may include, but not be limited to, the following areas:*

- Potentially vulnerable participants
- Safeguarding/child protection
- Risks to participants and/or researchers
- International research
- Sensitive topics
- Sampling
- Gatekeepers
- Informed consent
- Assent
- Methods
- Confidentiality
- Anonymity
- Data storage/security
- Data transfer/transmission
- Data sharing/encryption
- Data documentation
- Data management plan
- Data protection
- Reporting
- Dissemination and use of findings

Although the schools in the study will not be named, there is always the possibility that they may be recognized due to the fact that they will all be selective independent girls' schools based in or just outside of London. Therefore, full anonymity may not be guaranteed (Dowling and Brown 2010). However, the identities of individual students will be anonymous at the survey stage as they will never be asked for their names and because the moderately large student sample size will be randomly generated i.e. one form from each year group. In addition, individual responses will not be reported; rather, aggregated responses will be used in the thesis.

The focus group conversations will be recorded on my laptop using Garageband software. These will be stored on the laptop and a 'back-up' copy will be saved on an external hard-drive and in my personal applecart storage area, to which only I will have access. The conversations will not be typed with the real names of the students, so their responses will not be able to be identifiable by anyone else. The recordings will be stored for the duration of the EdD process. Although the survey will be carried out using the school SurveyMonkey account, I will be the only password holder for the account during the survey stage. Whilst the students will need to identify which school they attend on the survey so that data from individual schools can be analysed, the pupils themselves will not be identifiable and the survey data will be deleted from the account once the data has been analysed and downloaded. This data will then be stored in a similar way to the focus group conversations – on my laptop, on an external hard-drive and in my applecart storage area.

Whilst consent from the Headteacher and/or Governors of the schools in the study will be asked in the first instance, the main ethical issues for this study centres on the obtaining of informed consent (Robson 2002) from the students involved. In addition, as whole form classes will be invited to take part in the study, it is easy to foresee the role that my position of power will have over their involvement (Gillies and Alldred 2002). For example, if the institutions agree to their students taking part in the study the students may not feel that they are able to decline. At my own institution this could be exacerbated at the focus group stage, where the students participating in the discussions will be aware that they are providing information to one of their teachers and may not feel able to decline the invitation to be involved out of fear of 'letting me down'. This may also shape the responses they give in the focus group interviews as well as leaving them with a sense of disempowerment (Gillies and Alldred 2002; Malone 2003).

To obtain the informed consent of the students involved at the focus group stage information about the nature of the information to be collected through the focus groups will be sent home to parents, giving them the opportunity to withhold their consent if they do not wish their daughter to take part. The purpose of the focus group will also be made clear to the students before the discussion begin, again giving them the option to 'opt out' at any stage if they no longer wish to be involved in the study. They will also receive an information sheet that will include a section where they can record their consent to be a part of the focus group stage. It is

important that they receive this level of information about the study before the focus groups as they will be in a ore vulnerable position – they will be aware that I can hear them give their responses to the questions, which is not the same as anonymously completing a survey. Before the students complete the surveys, it will be a condition that the participating schools send home information about the study to parents. They will then be given the option of 'opting out' if they do not wish their daughters to take part in the study. The start of the questionnaire itself will have a statement that makes it clear that the students do not have to take part if they do not want to and that they can withdraw from the survey at any point. There will not be a place for the students to record their names, although there will be a question asking them to state their year group and there may be an optional question about ethnicity.

**References:**

Dowling, P. and Brown, A. (2010). *Doing Research/Reading Research: Re-interrogating Education.* Oxon: Routledge.

Gillies, V. and Alldred, P. (2002). 'The Ethics of Intention: research as a political tool.' In M. Mauthner, M. Birch, J. Jessop and T. Miller (Eds). *Ethics in Qualitative Research.* London: SAGE Publications.

Malone, S. (2003). 'Ethics at Home: informed consent in you own backyard.' *Qualitative Studies in Education*, 16 (6), pp. 797-815.

Robson, C. (2002). *Real World Research.* Second Edition. Oxford: Blackwell Publishing.

**Section 8 Attachments** Please attach the following items to this form, or explain if not attached

| | | | |
|---|---|---|---|
| a. | Information sheet and other materials to be used to inform potential participants about the research. | Yes X | No ☐ |
| b. | Consent form | Yes X | No ☐ |
| c. | The proposal for the project, if applicable | Yes X | No ☐ |
| d. | Approval letter from external Research Ethics Committee, if applicable | Yes ☐ | No X |

**Section 9 Declaration**

I confirm that to the best of my knowledge this is a full description of the ethics issues that may arise in the course of this project

Name

Date

Please submit your completed ethics forms to your supervisor/course administrator.

## Departmental use

If a project raises particularly challenging ethics issues, or a more detailed review would be appropriate, you may refer the application to the Research Ethics Coordinator (via researchethics@ioe.ac.uk) so that it can be submitted to the Faculty Research Ethics Committee (FREC) for consideration. FREC Chairs, FREC representatives in your department and the research ethics coordinator can advise you, either to support your review process, or help decide whether an application should be referred to the FREC.
*Also see' when to pass a student ethics review up to Faculty level committee':*
*http://intranet.ioead/ioe/cms/get.asp?cid=13449*

**Reviewer 1**

| | |
|---|---|
| Supervisor name | Andrea Creech |
| Supervisor comments | Happy to approve this proposal |
| Supervisor signature | |

**Reviewer 2**

| | |
|---|---|
| Advisory committee member name | Lynne Rogers |
| Advisory committee member comments | Happy to approve this proposal |
| Advisory committee member signature | |

**Decision**

| | | |
|---|---|---|
| Date decision was made | | |
| Decision | *Approved and reported to FREC* | ☐ |
| | Referred back to applicant and supervisor | ☐ |
| | Referred to FREC for review | ☐ |
| **Recording** | Recorded in the student information system | ☐ |

Once completed and approved, please send this form and associated documents to the faculty research administrator to record on the student information system and to securely store.

Further guidance on ethical issues can be found on the IOE website at http://www.ioe.ac.uk/about/policiesProcedures/41899.html and www.ethicsguidebook.ac.uk

Further guidance on recording ethics applications in the student information system can be found on the intranet http://intranet.ioead/ioe/cms/get.asp?cid=13449

# Appendix 3: Information for Parents of Focus Group students

Dear Parent/Guardian

**Research into student perceptions of their learning**

Over the next year, as part of doctoral research with the Institute of Education, London, I will be researching how girls in the selective independent sector approach their learning and what they think about challenging work. This will help to inform the school in the development of our teaching and learning.

Your daughter has been invited to take part in a focus group interview this half term with several other girls from her year group. These interviews will take place after school during the week beginning 17th June 2013 and will be completed by 4.55pm. The focus group interview will be audio recorded and the contents transcribed but it will not be heard by anyone other than myself. Information from this focus group will be used in the construction of a questionnaire that will be completed by girls across Years 9 to 11. Your daughter will remain anonymous and her name will not appear in the transcription of the recordings or in the research report. The name of the school will also not appear in the final written report.

Please sign the consent form below and return to school with your daughter when she attends her focus group interview if you agree for her to be involved in this research.

Yours sincerely

Mrs G Hannan

---

**Research into student perceptions of their learning**

Daughter's name

Form

I do/do not give my permission for my daughter to be involved in a focus group interview.

# Appendix 4: Information for Focus Group Students

**Research into student perceptions of their learning**

Dear

Over the next year, as part of doctoral research with the Institute of Education, London, I will be researching how girls in the selective independent sector approach their learning and what they think about challenging work. This will help to inform the school in the development of our teaching and learning.

You have been invited to take part in a focus group interview this half term with several other girls from your year group. You will be asked questions about your learning in school and what motivates you to complete work. Your responses will help me to create a survey that will be completed by girls across Years 9 to 11, next academic year.

The focus group interview will be audio recorded and the contents transcribed but it will not be heard by anyone other than myself. You will remain anonymous and your name will not appear in the transcription of the recording or in the research report. The name of the school will also not be recorded anywhere in the final report that I write.

Most importantly, you are allowed to withdraw from the focus group at any stage.

If you still agree to be a part of this study after reading this information, please could you sign the consent form below and return to me on the day of your focus group:

Name: _____

Form: _____

Date: _____

# Appendix 5: Information for Parents of students completing the survey (Pro Forma)

Dear Parent/Guardian

**Research into student perceptions of their learning**

A doctoral student at the Institute of Education, London, has invited the school to be a part of her study into how girls in the independent sector approach their learning and what they think about challenging work. The findings of the study will help to inform the school in the development of our teaching and learning.

Your daughter's class has been invited to take part in an online questionnaire this half-term. Your daughter and her responses will remain anonymous throughout the questionnaire and subsequent data analysis. The name of the school will also not appear in the final written report.

Please sign the form below and return to ….. by …….

Yours sincerely,

---

**Research into student perceptions of their learning**

Daughter's name

Form

I do/do not give my permission for my daughter to be involved in the questionnaire into student perceptions of their learning.

# Appendix 6: The surveys

# Yr 9 Perceptions of challenging work

***1. What does the phrase 'challenging work' mean to you?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Work that makes you think or stretches you | ○ | ○ | ○ | ○ | ○ |
| Work that gets you to apply your own knowledge to new situations | ○ | ○ | ○ | ○ | ○ |
| Tasks that are harder than normal classwork or homework | ○ | ○ | ○ | ○ | ○ |
| You have to push yourself a bit further so that you can complete it | ○ | ○ | ○ | ○ | ○ |
| Finding new ways of tackling problems | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

***2. What does 'challenging work' look like in the classroom?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Essays | ○ | ○ | ○ | ○ | ○ |
| Group research tasks that rely on other people's contributions | ○ | ○ | ○ | ○ | ○ |
| Tasks that require you to apply your knowledge | ○ | ○ | ○ | ○ | ○ |
| Work completed under timed conditions | ○ | ○ | ○ | ○ | ○ |
| Research homework | ○ | ○ | ○ | ○ | ○ |
| Extension questions | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 9 Perceptions of challenging work

***3. On a scale of 1 to 5 with 5 being the highest, how difficult is the work you are currently given to complete in the following subjects?**

| | N/A | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Art | ○ | ○ | ○ | ○ | ○ | ○ |
| Classical Civilisation | ○ | ○ | ○ | ○ | ○ | ○ |
| Drama | ○ | ○ | ○ | ○ | ○ | ○ |
| English | ○ | ○ | ○ | ○ | ○ | ○ |
| Geography | ○ | ○ | ○ | ○ | ○ | ○ |
| History | ○ | ○ | ○ | ○ | ○ | ○ |
| ICT | ○ | ○ | ○ | ○ | ○ | ○ |
| Language/s | ○ | ○ | ○ | ○ | ○ | ○ |
| Latin | ○ | ○ | ○ | ○ | ○ | ○ |
| Mathematics | ○ | ○ | ○ | ○ | ○ | ○ |
| Music | ○ | ○ | ○ | ○ | ○ | ○ |
| Religious Education | ○ | ○ | ○ | ○ | ○ | ○ |
| Sciences | ○ | ○ | ○ | ○ | ○ | ○ |

***4. Would you like your schoolwork to be easier or harder? Tick the statement you agree with the most.**

- ○ I would like my schoolwork to be easier in all subjects
- ○ I would like my schoolwork to be easier in some subjects
- ○ I think that the level of my schoolwork is about right
- ○ I would like my schoolwork to be harder in all subjects
- ○ I would like my schoolwork to be harder in some subjects

***5. If you would like your schoolwork to be easier, why is this?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I would not like my schoolwork to be easier | ○ | ○ | ○ | ○ | ○ |
| I find the difficulty of the work can make me stressed | ○ | ○ | ○ | ○ | ○ |
| I find some of the work irrelevant | ○ | ○ | ○ | ○ | ○ |
| You can get better before pushing yourself further if the work is at an easier level | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 9 Perceptions of challenging work

***6. If you would like your schoolwork to be harder, why is this?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I would not like my schoolwork to be harder | ◯ | ◯ | ◯ | ◯ | ◯ |
| I feel that I am more likely to learn more from what I'm doing wrong | ◯ | ◯ | ◯ | ◯ | ◯ |
| I want to put my knowledge into use/apply it to new situations | ◯ | ◯ | ◯ | ◯ | ◯ |
| It's more enjoyable when you get it right | ◯ | ◯ | ◯ | ◯ | ◯ |
| I am sometimes bored | ◯ | ◯ | ◯ | ◯ | ◯ |
| I sometimes want to know a little bit more | ◯ | ◯ | ◯ | ◯ | ◯ |
| I find the work can be repetitive | ◯ | ◯ | ◯ | ◯ | ◯ |
| Sometimes we are challenged in quantity rather than quality | ◯ | ◯ | ◯ | ◯ | ◯ |

Other (please specify)

***7. Do you notice a difference in the standard of work you complete this year compared to last year? Tick the statement you agree with the most.**

- ◯ I think that the standard of work this year is easier in all subjects
- ◯ I think that the standard of work this year is easier in some subjects
- ◯ I think that the standard of work this year is much the same as last year
- ◯ I think that the standard of work this year is harder in all subjects
- ◯ I think that the standard of work this year is harder in some subjects

***8. On a scale of 1 to 5 with 5 being the highest, how much do you enjoy the schoolwork you are currently given to complete?**

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5

# Yr 9 Perceptions of challenging work

***9. How do your teachers talk about learning or schoolwork with you?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| My teachers encourage us to do our own research outside of what we're already doing in class | ○ | ○ | ○ | ○ | ○ |
| *My teachers try to put us* outside our comfort zone | ○ | ○ | ○ | ○ | ○ |
| My teachers are always bring up GCSEs and tests or Summer exams | ○ | ○ | ○ | ○ | ○ |
| My teachers regularly link our work to real life situations | ○ | ○ | ○ | ○ | ○ |
| My teachers do not say they expect us to get certain grades | ○ | ○ | ○ | ○ | ○ |
| I feel as if my teachers are just getting through the syllabus | ○ | ○ | ○ | ○ | ○ |
| I feel like there's a lot of focus around grades | ○ | ○ | ○ | ○ | ○ |
| My teachers often compare our individual performance with the rest of the year group | ○ | ○ | ○ | ○ | ○ |
| My teachers encourage us to compare our own performance with what we could have done | ○ | ○ | ○ | ○ | ○ |
| My teachers do not usually say that work is hard | ○ | ○ | ○ | ○ | ○ |
| I just focus on the grade that I want to achieve | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 9 Perceptions of challenging work

***10. How do your parent/s talk about learning or schoolwork with you?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| My parent/s encourage me to learn from my mistakes | ○ | ○ | ○ | ○ | ○ |
| My parent/s don't mind too much about my grades; they're more concerned about the effort I put into my work | ○ | ○ | ○ | ○ | ○ |
| Although my parent/s say that they don't really mind about the grades I get, I know that they do actually mind quite a lot | ○ | ○ | ○ | ○ | ○ |
| My parent/s will get quite annoyed if I got a bad grade | ○ | ○ | ○ | ○ | ○ |
| My parent/s don't push me much | ○ | ○ | ○ | ○ | ○ |
| I really don't like talking to my parent/s about schoolwork because I'd much prefer to just do it and get it over and done with | ○ | ○ | ○ | ○ | ○ |
| My parent/s always compare my performance at school to my siblings or my friends | ○ | ○ | ○ | ○ | ○ |
| I think that my parent/s give me the right amount of support to help me to feel good about my learning | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 9 Perceptions of challenging work

***11. How do you feel about starting your GCSE courses next year?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I'm worried that the work in Year 10 is going to be a big jump from Year 9 work | ○ | ○ | ○ | ○ | ○ |
| I don't know what to expect when I start my GCSE courses | ○ | ○ | ○ | ○ | ○ |
| I'm quite excited about starting GCSEs next year | ○ | ○ | ○ | ○ | ○ |
| I am working harder this year in the subjects I intend to carry on next year | ○ | ○ | ○ | ○ | ○ |
| I lack the motivation to work hard in the subjects I don't intend to study at GCSE | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 9 Perceptions of challenging work

***12. What type of extension tasks do you prefer to complete?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Optional essays | ○ | ○ | ○ | ○ | ○ |
| Planning/carrying out additional scientific experiments | ○ | ○ | ○ | ○ | ○ |
| A research task/homework that goes beyond syllabus content | ○ | ○ | ○ | ○ | ○ |
| Extension questions e.g. optional questions at the end of a task or an extra worksheet that requires you to apply your knowledge | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

***13. How often do you complete extension tasks?**

| | Never | Sometimes | Often | Always |
|---|---|---|---|---|
| Optional essays | ○ | ○ | ○ | ○ |
| Planning/carrying out additional scientific experiments | ○ | ○ | ○ | ○ |
| A research task/homework that goes beyond syllabus content | ○ | ○ | ○ | ○ |
| Extension questions e.g. optional questions at the end of a task or an extra worksheet that requires you to apply your knowledge | ○ | ○ | ○ | ○ |

## Yr 9 Perceptions of challenging work

***14. What factors make you more likely to attempt challenging work?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I am more likely to complete a challenging task if you know that it's going to contribute to help me in an exam | ○ | ○ | ○ | ○ | ○ |
| I am more likely to complete a challenging task if I will get a grade for it | ○ | ○ | ○ | ○ | ○ |
| I am more likely to complete a challenging task if I am interested in it | ○ | ○ | ○ | ○ | ○ |
| I am more likely to attempt a challenging task if my teacher's given us a lot of background to the subject | ○ | ○ | ○ | ○ | ○ |
| I find it really satisfying when you finish a challenging task | ○ | ○ | ○ | ○ | ○ |
| I am competitive so I complete challenging tasks so that I can be better than other people or stay at the same standard as other people | ○ | ○ | ○ | ○ | ○ |
| I will attempt challenging tasks as I don't like letting myself down | ○ | ○ | ○ | ○ | ○ |
| I am more likely to attempt a challenging task if someone says that I can get a good grade as it boosts my self-esteem | ○ | ○ | ○ | ○ | ○ |
| I do not like challenging work because I'm afraid that I won't be able to do it well | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

***15. What's more important to you, understanding or attainment?**

- ○ I think that understanding is more important that attainment
- ○ I think that attainment is more important than understanding
- ○ You cannot have attainment without understanding

## Yr 9 Perceptions of challenging work

***16. How do test results or homework grades affect your attitudes towards your learning?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I think it is more important to learn from my mistakes than to get a high grade or mark | ○ | ○ | ○ | ○ | ○ |
| I revise harder for tests that go towards a report sent *home to my parents* | ○ | ○ | ○ | ○ | ○ |
| I am disappointed when I get a low mark or grade | ○ | ○ | ○ | ○ | ○ |
| I like to know what mark or grade other people in the class get | ○ | ○ | ○ | ○ | ○ |
| I don't mind other people in the class knowing what mark or grade I get for my work | ○ | ○ | ○ | ○ | ○ |
| If I get a low grade or mark I feel that it is my responsibility to improve my performance | ○ | ○ | ○ | ○ | ○ |
| If I get a low grade or mark I feel motivated to improve my performance | ○ | ○ | ○ | ○ | ○ |
| If I get a low grade or mark I think that my teacher should do more to help me to improve | ○ | ○ | ○ | ○ | ○ |
| I only enjoy learning a subject when I feel that I am achieving high marks or grades | ○ | ○ | ○ | ○ | ○ |
| I don't mind if I don't achieve highly in a subject that I don't enjoy | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 9 Perceptions of challenging work

***17. What do you think might help you to achieve more highly at school?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I would achieve more highly if there was more variety in teaching methods in our lessons | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if more of our work was to be completed online/on the computer | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if we were given more textbook work or work on the board | ○ | ○ | ○ | ○ | ○ |
| I achieve more when a teacher is really passionate about their subject | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if we were given more mini competitions | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if we were given more group tasks | ○ | ○ | ○ | ○ | ○ |
| I achieve more highly when I set personal targets | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if all the teachers were of the same standard | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if there was more focus on how to learn from mistakes | ○ | ○ | ○ | ○ | ○ |
| I achieve more highly when we are frequently given marks or grades | ○ | ○ | ○ | ○ | ○ |
| I achieve more highly when I can compare my results to other people in my class or year group | ○ | ○ | ○ | ○ | ○ |
| I achieve more highly when I think that my teacher believes in my ability | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 9 Perceptions of challenging work

***18. What do you think might help you to enjoy your time more at school?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I would find school more enjoyable if we received more recognition and rewards for our achievements e.g. in assembly | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we received more grades for our work | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if there was less of a focus on academic work | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we were given more projects to complete | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if there was a greater variety of activities in our lessons | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we went on more school trips | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we had more speakers come in to talk to us | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we had more passionate teachers | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we didn't have to write targets for subjects | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we were put into sets in more subjects | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if our teachers put us under less pressure | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 10 and Yr 11 Perceptions of challenging work

***1. Which year group are you currently in?**

- ◯ Year 10
- ◯ Year 11

# Yr 10 and Yr 11 Perceptions of challenging work

***2. What does the phrase 'challenging work' mean to you?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Work that makes you think or stretches you | ○ | ○ | ○ | ○ | ○ |
| Work that gets you to apply your own knowledge to new situations | ○ | ○ | ○ | ○ | ○ |
| Tasks that are harder than normal classwork or homework | ○ | ○ | ○ | ○ | ○ |
| You have to push yourself a bit further so that you can complete it | ○ | ○ | ○ | ○ | ○ |
| Finding new ways of tackling problems | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

***3. What does 'challenging work' look like in the classroom?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Essays | ○ | ○ | ○ | ○ | ○ |
| Group research tasks that rely on other people's contributions | ○ | ○ | ○ | ○ | ○ |
| Tasks that require you to apply your knowledge | ○ | ○ | ○ | ○ | ○ |
| Work completed under timed conditions | ○ | ○ | ○ | ○ | ○ |
| Research homework | ○ | ○ | ○ | ○ | ○ |
| Extension questions | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 10 and Yr 11 Perceptions of challenging work

***4. On a scale of 1 to 5 with 5 being the highest, how difficult is the work you are currently given to complete in the following subjects?**

| | N/A | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Art | ○ | ○ | ○ | ○ | ○ | ○ |
| Classical Civilisation | ○ | ○ | ○ | ○ | ○ | ○ |
| *Drama* | ○ | ○ | ○ | ○ | ○ | ○ |
| English | ○ | ○ | ○ | ○ | ○ | ○ |
| Geography | ○ | ○ | ○ | ○ | ○ | ○ |
| History | ○ | ○ | ○ | ○ | ○ | ○ |
| ICT | ○ | ○ | ○ | ○ | ○ | ○ |
| Language/s | ○ | ○ | ○ | ○ | ○ | ○ |
| Latin | ○ | ○ | ○ | ○ | ○ | ○ |
| Mathematics | ○ | ○ | ○ | ○ | ○ | ○ |
| Music | ○ | ○ | ○ | ○ | ○ | ○ |
| Religious Education | ○ | ○ | ○ | ○ | ○ | ○ |
| Sciences | ○ | ○ | ○ | ○ | ○ | ○ |

***5. Would you like your schoolwork to be easier or harder? Tick the statement you agree with the most.**

- ○ I would like my schoolwork to be easier in all subjects
- ○ I would like my schoolwork to be easier in some subjects
- ○ I think that the level of my schoolwork is about right
- ○ I would like my schoolwork to be harder in all subjects
- ○ I would like my schoolwork to be harder in some subjects

***6. If you would like your schoolwork to be easier, why is this?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I would not like my schoolwork to be easier | ○ | ○ | ○ | ○ | ○ |
| I find the difficulty of the work can make me stressed | ○ | ○ | ○ | ○ | ○ |
| I find some of the work irrelevant | ○ | ○ | ○ | ○ | ○ |
| You can get better before pushing yourself further if the work is at an easier level | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 10 and Yr 11 Perceptions of challenging work

***7. If you would like your schoolwork to be harder, why is this?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I would not like my schoolwork to be harder | ◯ | ◯ | ◯ | ◯ | ◯ |
| I feel that I am more likely to learn more from what I'm doing wrong | ◯ | ◯ | ◯ | ◯ | ◯ |
| I want to put my knowledge into use/apply it to new situations | ◯ | ◯ | ◯ | ◯ | ◯ |
| It's more enjoyable when you get it right! am sometimes bored | ◯ | ◯ | ◯ | ◯ | ◯ |
| I sometimes want to know a little bit more | ◯ | ◯ | ◯ | ◯ | ◯ |
| I find the work can be repetitive | ◯ | ◯ | ◯ | ◯ | ◯ |
| Sometimes we are challenged in quantity rather than quality | ◯ | ◯ | ◯ | ◯ | ◯ |

Other (please specify)

***8. Do you notice a difference in the standard of work you complete this year compared to last year? Tick the statement you agree with the most.**

- ◯ I think that the standard of work this year is easier in all subjects
- ◯ I think that the standard of work this year is easier in some subjects
- ◯ I think that the standard of work this year is much the same as last year
- ◯ I think that the standard of work this year is harder in all subjects
- ◯ I think that the standard of work this year is harder in some subjects

***9. On a scale of 1 to 5 with 5 being the highest, how much do you enjoy the schoolwork you are currently given to complete?**

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5

# Yr 10 and Yr 11 Perceptions of challenging work

***10. How do your teachers talk about learning or schoolwork with you?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| My teachers encourage us to do our own research outside of what we're already doing in class | ○ | ○ | ○ | ○ | ○ |
| My teachers try to put us outside our comfort zone | ○ | ○ | ○ | ○ | ○ |
| My teachers are always bring up GCSEs and tests or Summer exams | ○ | ○ | ○ | ○ | ○ |
| My teachers regularly link our work to real life situations | ○ | ○ | ○ | ○ | ○ |
| My teachers do not say they expect us to get certain grades | ○ | ○ | ○ | ○ | ○ |
| I feel as if my teachers are just getting through the syllabus | ○ | ○ | ○ | ○ | ○ |
| I feel like there's a lot of focus around grades | ○ | ○ | ○ | ○ | ○ |
| My teachers often compare our individual performance with the rest of the year group | ○ | ○ | ○ | ○ | ○ |
| My teachers encourage us to compare our own performance with what we could have done | ○ | ○ | ○ | ○ | ○ |
| My teachers do not usually say that work is hard | ○ | ○ | ○ | ○ | ○ |
| I just focus on the grade that I want to achieve | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 10 and Yr 11 Perceptions of challenging work

***11. How do your parent/s talk about learning or schoolwork with you?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| My parent/s encourage me to learn from my mistakes | ○ | ○ | ○ | ○ | ○ |
| My parent/s don't mind too much about my grades; they're more concerned about the effort I put into my work | ○ | ○ | ○ | ○ | ○ |
| Although my parent/s say that they don't really mind about the grades I get, I know that they do actually mind quite a lot | ○ | ○ | ○ | ○ | ○ |
| My parent/s will get quite annoyed if I got a bad grade | ○ | ○ | ○ | ○ | ○ |
| My parent/s don't push me much | ○ | ○ | ○ | ○ | ○ |
| I really don't like talking to my parent/s about schoolwork because I'd much prefer to just do it and get it over and done with | ○ | ○ | ○ | ○ | ○ |
| My parent/s always compare my performance at school to my siblings or my friends | ○ | ○ | ○ | ○ | ○ |
| I think that my parent/s give me the right amount of support to help me to feel good about my learning | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 10 and Yr 11 Perceptions of challenging work

***12. How did you make your GCSE choices?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I picked the subjects I really enjoyed | ○ | ○ | ○ | ○ | ○ |
| I based my subject choices on what I'll get out of a *subject in the long run* e.g. university place, career | ○ | ○ | ○ | ○ | ○ |
| I made decisions based on how well I was doing in particular subjects | ○ | ○ | ○ | ○ | ○ |
| I wanted to have a mix of subjects to keep my options open for the future | ○ | ○ | ○ | ○ | ○ |
| I chose subjects I felt that my parents/teachers wanted me to choose | ○ | ○ | ○ | ○ | ○ |
| I based my choices on the experiences of an older sibling | ○ | ○ | ○ | ○ | ○ |
| The subjects which I found more challenging, I dropped | ○ | ○ | ○ | ○ | ○ |
| I found it really hard to decide which subjects to choose | ○ | ○ | ○ | ○ | ○ |
| I am pleased with the subjects I have chosen | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

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## Yr 10 and Yr 11 Perceptions of challenging work

***13. How do you feel about your GCSE examinations?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I feel worried about my GCSE examinations | ○ | ○ | ○ | ○ | ○ |
| I'm not as worried as I used to be when I was younger because I realise that I can keep up with the workload | ○ | ○ | ○ | ○ | ○ |
| *I don't feel that the GCSEs* are real for me yet | ○ | ○ | ○ | ○ | ○ |
| For the subjects I'm not very good at I'm scared; but for the subjects I'm feeling confident in right now I'm not too worried yet | ○ | ○ | ○ | ○ | ○ |
| I think that GCSEs motivate me to work harder: everything you do in Year 10 and Year 11 is important | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 10 and Yr 11 Perceptions of challenging work

***14. What type of extension tasks do you prefer to complete?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Optional essays | ○ | ○ | ○ | ○ | ○ |
| Planning/carrying out additional scientific experiments | ○ | ○ | ○ | ○ | ○ |
| A research task/homework *that goes beyond syllabus* content | ○ | ○ | ○ | ○ | ○ |
| Extension questions e.g. optional questions at the end of a task or an extra worksheet that requires you to apply your knowledge | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

***15. How often do you complete extension tasks?**

| | Never | Sometimes | Often | Always |
|---|---|---|---|---|
| Optional essays | ○ | ○ | ○ | ○ |
| Planning/carrying out additional scientific experiments | ○ | ○ | ○ | ○ |
| A research task/homework that goes beyond syllabus content | ○ | ○ | ○ | ○ |
| Extension questions e.g. optional questions at the end of a task or an extra worksheet that requires you to apply your knowledge | ○ | ○ | ○ | ○ |

## Yr 10 and Yr 11 Perceptions of challenging work

***16. What factors make you more likely to attempt challenging work?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I am more likely to complete a challenging task if you know that it's going to contribute to help me in an exam | ○ | ○ | ○ | ○ | ○ |
| I am more likely to complete a challenging task if I will get a grade for it | ○ | ○ | ○ | ○ | ○ |
| I am more likely to complete a challenging task if I am interested in it | ○ | ○ | ○ | ○ | ○ |
| I am more likely to attempt a challenging task if my teacher's given us a lot of background to the subject | ○ | ○ | ○ | ○ | ○ |
| I find it really satisfying when you finish a challenging task | ○ | ○ | ○ | ○ | ○ |
| I am competitive so I complete challenging tasks so that I can be better than other people or stay at the same standard as other people | ○ | ○ | ○ | ○ | ○ |
| I will attempt challenging tasks as I don't like letting myself down | ○ | ○ | ○ | ○ | ○ |
| I am more likely to attempt a challenging task if someone says that I can get a good grade as it boosts my self-esteem | ○ | ○ | ○ | ○ | ○ |
| I do not like challenging work because I'm afraid that I won't be able to do it well | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

***17. What's more important to you, understanding or attainment?**

- ○ I think that understanding is more important that attainment
- ○ I think that attainment is more important than understanding
- ○ You cannot have attainment without understanding

## Yr 10 and Yr 11 Perceptions of challenging work

***18. How do test results or homework grades affect your attitudes towards your learning?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I think it is more important to learn from my mistakes than to get a high grade or mark | ○ | ○ | ○ | ○ | ○ |
| I revise harder for tests that *go towards a report sent* home to my parents | ○ | ○ | ○ | ○ | ○ |
| I am disappointed when I get a low mark or grade | ○ | ○ | ○ | ○ | ○ |
| I like to know what mark or grade other people in the class get | ○ | ○ | ○ | ○ | ○ |
| I don't mind other people in the class knowing what mark or grade I get for my work | ○ | ○ | ○ | ○ | ○ |
| If I get a low grade or mark I feel that it is my responsibility to improve my performance | ○ | ○ | ○ | ○ | ○ |
| If I get a low grade or mark I feel motivated to improve my performance | ○ | ○ | ○ | ○ | ○ |
| If I get a low grade or mark I think that my teacher *should do more to help* me to improve | ○ | ○ | ○ | ○ | ○ |
| I only enjoy learning a subject when I feel that I am achieving high marks or grades | ○ | ○ | ○ | ○ | ○ |
| I don't mind if I don't achieve highly in a subject that I don't enjoy | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

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## Yr 10 and Yr 11 Perceptions of challenging work

***19. What do you think might help you to achieve more highly at school?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I would achieve more highly if there was more variety in teaching methods in our lessons | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if more of our work was to be completed online/on the computer | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if we were given more textbook work or work on the board | ○ | ○ | ○ | ○ | ○ |
| I achieve more when a teacher is really passionate about their subject | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if we were given more mini competitions | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if we were given more group tasks | ○ | ○ | ○ | ○ | ○ |
| I achieve more highly when I set personal targets | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if all the teachers were of the same standard | ○ | ○ | ○ | ○ | ○ |
| I would achieve more highly if there was more focus on how to learn from mistakes | ○ | ○ | ○ | ○ | ○ |
| I achieve more highly when we are frequently given marks or grades | ○ | ○ | ○ | ○ | ○ |
| I achieve more highly when I can compare my results to other people in my class or year group | ○ | ○ | ○ | ○ | ○ |
| I achieve more highly when I think that my teacher believes in my ability | ○ | ○ | ○ | ○ | ○ |

Other (please specify)

## Yr 10 and Yr 11 Perceptions of challenging work

***20. What do you think might help you to enjoy your time more at school?**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I would find school more enjoyable if we received more recognition and rewards for our achievements e.g. in assembly | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we received more grades for our work | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if there was less of a focus on academic work | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we were given more projects to complete | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if there was a greater variety of activities in our lessons | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we went on more school trips | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we had more speakers come in to talk to us | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we had more passionate teachers | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we didn't have to write targets for subjects | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if we were put into sets in more subjects | ○ | ○ | ○ | ○ | ○ |
| I would find school more enjoyable if our teachers put us under less pressure | ○ | ○ | ○ | ○ | ○ |

Other (please specify)